

Harvard Medical

ALUMNI BULLETIN WINTER 1991/92



The Cocoanut Grove Night: We Remember

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Harvard Medical

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The catch phrase of our times is *to share*. In this issue we share with you recent developments in computerized, desk-top publishing, which allow both design changes and that other buzz phrase, *cost containment*. No radical reconstructive surgery, mind you, but tasteful cosmesis (*obs.*). We stand behind no stonewall; we welcome your comments. *De gustibus disputandum est*.

This issue focuses on memories of the Cocoanut Grove disaster, 50 years onward, by individuals who were there—"there" being the emergency ward of the MGH. Thomas Coleman '44, a second-year student at the time, recalls the apocalyptic vision of the "brick corridor"; Oliver Cope '28, Brad Cannon '33 and Franny Moore '39, in a white suit at the time, tell their sides of it. Similar memories must haunt those who were at the Boston City Hospital, where the majority of victims were given refuge that dreadful night.

So as not to dwell on tragedy too long, we move on to the story of a venerable, journalistic relative—shall we say a great-grandfather once removed—*The New England Journal of Medicine*, as told by its retiring editor, Arnold Relman. James Neller '39 relives his memorable encounter with Harvard's counterpart to Sherlock Holmes, George B. Magrath (Class of 1898), medical examiner and first professor of legal medicine.

Then back to the present with an excerpt from a new novel by Ethan Canin '92, who graced our pages three years ago; two disparate reflections on the problems of residency by Jim Cashell '91 and Elizabeth Rider, also '91; a recognition of the Gundersen-Harvard tradition in Wisconsin; and, finally, a new slant on the Civil War, if this is possible, with Newton Peabody's '48 account of Lucius Manlius Sargent, Class of 1857, who resigned his medical commission in the 2nd Mass. Volunteers to join the 1st Mass. Calvary, so that he could make wounds instead of curing them.

Gordon Scannell '40

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Letters

In the Name of Pain

I want to congratulate the *Harvard Medical Alumni Bulletin* for its courageous stand in publishing the articles concerning drugs in the Summer '91 issue. I was especially moved by the articles by Frank Speaker and Sherwin Nuland.

Lester Grinspoon's article on the medical potential of illicit drugs was also excellent, bringing into question much of our current official government position on the use of drugs in medicine. The area of medicine in which I am presently working is pain management. Issues concerning the prolonged usage of narcotic medications bring me into potential conflict with the Drug Enforcement Agency and the Department of Professional Regulation in my own state of Florida.

It is my opinion that it is past time for the medical profession to stand up and state that the judicious use of narcotic medications for the alleviation of chronic pain, whether it be from cancer or benign causes, is medically necessary and indicated in selected situations. We should not automatically label the patients who have prescriptions from their physicians for narcotic medications as addicts. We should no longer label physicians as yielding to the "habit" of the "addictive behaviors" of such patients.

Granted, this is a very thorny set of issues, but I believe that we should help change public policies with respect to the use of narcotics in pain relief. This can best be done through working with the local and state medical societies and endeavoring to bring about changes in state legislation concerning the legality of prescribing narcotic medication.

Thomas C. A. Washburn '57

"New" Trend

I read with interest the statement "... a new trend—residency sharing—was set this year" in the Pulse item "The Match is Struck" (Summer '91). As a historical note, I would like to document that in 1954 Dr. Harry Solomon, with his innate sensitivity to women's issues, split a residency at Mass. Mental Health Center. I was the recipient of the half-residency for four years and was able to accommodate my continuous psychiatry training with raising three children.

This facilitation of dual responsibilities allowed me to continue with my professional career: attaining associate professor at Harvard and later a tenure professor status at the University of Miami. I am heading the child abuse center within the Office of the State Attorney, Eleventh Judicial Circuit of Florida, continuing to contribute to my elected area of medicine.

Raquel E. Cohen '49

An Experiment Before Its Time

I want to tell of an experience of mine in medical school that has haunted me ever since because it could have saved many lives 10 years or so before it did.

In a bacteriology course I was curious to see what would happen to a blood agar plate with colonies of streptococcus if I put it in a drawer for a few days. What happened was that here and there green fuzzy stuff was growing, and around each was a 2-millimeter clear zone with no strep growing. I thought of showing it to Dr. Hans Zinsser, but assuming it must have been seen by many bacteriologists, I thought it couldn't be important. Chance doesn't favor the unprepared mind.

Horace Petit '31

Credit Due

My notes entitled "Mobile Reconnaissance" commemorating the reunion for the Class of 1966 were published in the Fall '91 issue of the *Bulletin*. However, the article did not fully credit the collaboration of Bob Owen, also Class of '66, who contributed photographs taken during our student days, and others taken during our several reunions. These photos were lovely companions to my own recollections.

I'm grateful to Bob, especially to the spirit of collaboration we developed in putting the piece together, and I would like his contribution to be fully acknowledged.

David E. Scharff '66

Ingersoll Remembered

The qualities described in Gordon Scannell's warm tribute to Frank Ingersoll '38 (Fall '91) were early recognized by his classmates when we made him class president, barely into the first year. He was a gentle man with unfailing integrity. "Mirror mirror on the wall, who was the best waiter of them all?" I think Frank was the only one of us Vanderbilt Hall waiters who did not get into trouble with Mrs. Robinson.

Frank Lepreau '38

New Affiliation for School

The Eye Research Institute (ERI) of the Retina Foundation became affiliated with the HMS Department of Ophthalmology in June, formalizing a long-standing relationship. Charles Schepens, MD, ERI founder and president, called the affiliation "a quantum leap in our ongoing efforts to fight blindness and diseases that threaten sight."

Since its founding 40 years ago, the ERI has developed various diagnostic instruments and treatment procedures, such as ophthalmoscopes for probing the eye structure and a scleral buckling technique for changing the eye's shape to encourage retinal reattachment.

Their research efforts will be joined with those of the Ophthalmology Department's Berman Gund and Howe Research laboratories at the Massachusetts Eye and Ear Infirmary: the former headed by Eliot Berson '62, Chatlos Professor of Ophthalmology; and the latter by Elio Raviola, PhD, MD, professor of ophthalmology and Bullard Professor of Neuroanatomy. Recent discoveries made at the laboratories include the genes responsible for certain cases of retinoblastoma and for retinitis pigmentosa.

Frederick Jakobiec '68, Williams Professor of Ophthalmology and head of the Ophthalmology Department, called the marriage "very significant" for the school, and for the department in particular. "The combined intellectual assets of the Eye Research Institute and the other components of the HMS Department of Ophthalmology are now without parallel in terms of the breadth and the depth of investigating and clinical expertise," he said.

National Medal of Science Awardees

Mary Ellen Avery, Thomas Morgan Rotch Professor of Pediatrics at Children's Hospital, and Paul C. Zamecnik '36 of the Worcester Foundation for Experimental Biology were two of 38 scientists awarded the National Medal of Science, considered the nation's highest scientific honor.

Avery was recognized for her discovery of the cause of respiratory distress syndrome in premature infants and for developing methods of treatment and prevention.

A pioneer in the treatment of premature and low-birthweight babies, Avery discovered the major cause of respiratory defense syndrome in premies: an insufficiency of pulmonary surfactant, the substance that lines the air spaces in the lungs and prevents their collapse. Her work led to improved mechanical ventilation and intensive care interventions.

Avery's research has also examined the synthesis, chemical composition and hormonal regulation of pulmonary surfactants; shown the linkage between diabetes and hyaline membrane disease; and provided the necessary background for treating expectant mothers with glucocorticoids to hasten lung maturation in their offspring. She founded the Joint Program in Neonatology in 1974, a program to coordinate the research and clinical expertise of neonatologists at Children's, Beth Israel and Brigham and Women's hospitals. →



Celebrating the new affiliation of the Eye Research Institute with the HMS Department of Ophthalmology are, left to right, Frederick Jakobiec, Charles Schepens, Daniel Tosteson and Elio Raviola.



Mary Ellen Avery



Paul C. Zamecnik

Paul C. Zamecnik '36, principal scientist at the Worcester Foundation for Experimental Biology in Shrewsbury, Massachusetts, won the National Medal of Science for his pioneering work on protein synthesis and the introduction of the concept of antisense oligonucleotides as a new chemotherapeutic principle. Zamecnik was a professor of oncologic medicine at Harvard and director of the Huntington Laboratories of Harvard University, located at MGH, from 1956 to 1979. He went to the Worcester Foundation in 1979 after having been at the Huntington Labs since 1936. Currently, he is looking for a better treatment for AIDS and influenza by means of antisense therapy.

Rudenstine Installed as 26th President

Students, faculty, alumni and guests from across the university and nation convened in Harvard Yard on October 18, 1991 to watch the installation of Neil L. Rudenstine as the 26th president of Harvard University. He succeeds Derek Bok, who stepped down after 20 years as president.

After the academic procession, the Memorial Church bells tolled at 3:00 PM, signalling the start of the ceremonies. There were speeches and, as has been the tradition at every installation for over 300 years, the insignia of office were transferred to the new president: the 1650 Charter of the College, the oldest surviving record book covering the years 1639 to 1795, the ceremonial keys to the university, President Josiah Quincy's seal of 1843 and the University seal of 1885 (on which Veritas first appeared).

In his inaugural address, Rudenstine spoke of the challenges faced by American universities as concerns rise about the cost of education, the quality of the undergraduate experience, research funding, and the limits of free speech. As for Harvard, he called for a "university-wide agenda" and described the school as "a collegial society outside the classroom as well as inside."

The inauguration festivities started that morning with a series of faculty symposia. One symposium, entitled "The Rise of Molecular Medicine," was moderated by HMS Dean Daniel C. Tosteson '48, Caroline Shields Walker Professor of Physiology, and featured as discussants Gerald D. Fischbach, Nathan Marsh Pusey Professor and chair of the Department of Neurobiology, Philip Leder '60, John Emory Andrus Professor and chair of the Department of Genetics, and Christopher T. Walsh, David Wesley

Neil Rudenstine installed as *tu* president.

Gaiser Professor and chair of the Department of Biological Chemistry and Pharmacology. Kenneth J. Ryan '52, Kate Macy Ladd Professor and chair of the Department of Obstetrics and Gynecology, spoke at the symposium called "Can the Professions Be Ethical?" and Bernadine Healy '69, director of the National Institutes of Health, discussed "Making Facts Matter" at one on "Connecting Learning and Policy."

The celebration closed with An Evening of Literature and Music, featuring Seamus Heaney, Toni Morrison, Mario Vargas Llosa, Adrienne Rich, Saul Bellow and a recital by Yo-Yo Ma.

A Very Good Year

Harvard Medical School will again benefit from a diverse and accomplished group of entering students. The HMS Class of 1995 has 101 men and 64 women—30 of whom are in the Health Sciences and Technology program. “Three years ago there was talk of gloom and doom about the dwindling pool of applicants,” says Gerald Foster ’51, director of admissions, “but this trend has really turned around. The national pool is up 25 percent and it is still going up.”

The HMS application pool was 2,713 this year—up a dramatic 275 from last year. However, more people have declined than in recent years—75—mostly for financial reasons.

The students matriculating come from 63 colleges—Harvard/Radcliffe topped the list with 27 students, Stanford University (12) came in second and Yale University (11) third. From the pool of 29 states, California was the biggest contributor. Students also come from nine other countries.

Continuing a trend seen in all medical schools, the students comprising the Class of 1995 are older on average than entering students of previous years, with 47 students aged between 24 and 36. Eighteen of the students accepted have deferred enrollment for one to two years to pursue “intellectually stimulating and personally rewarding activities.”

The Class of 1995 is enriched by ethnic diversity: of the 25 African-Americans who were offered places, 13 accepted. There are 8 Mexican Americans, 3 Puerto Ricans, 3 Native Americans/Alaskans and 43 Asian/Pacific Islanders.

Dean Tosteson Is Awarded Flexner

Dean Daniel Tosteson ’48 was awarded the 1991 Abraham Flexner Award for Distinguished Service to Medical Education by the Association of American Medical Colleges at its annual meeting in November 1991.

Tosteson was honored for “his notable contributions to the medical community and medical education.” Referring to his establishment of the New Pathway, which restructured the way HMS medical students learn through a closer interweaving of basic sciences and clinical experiences, the citation continues, “Through his leadership HMS developed an innovative curriculum, creating a vibrant and dynamic environment in the classroom, the laboratory, the hospital and the clinic—the many settings in which faculty and students learn medicine.”

Also cited was the growing emphasis in the HMS curriculum on the ethical and social dimensions of medicine, and the related establishment of the Division of Medical Ethics and the Departments of Social Medicine and Health Policy.

Photo by Barbara Steiner



Top, Judith Edersheim and Jan Friedrich, at orientation for the Class of 1995.

Bottom left, Incoming students consider extra-curricular activities at the Activities Fair.

Bottom right, Dean Daniel Tosteson.

Photo by Barbara Steiner

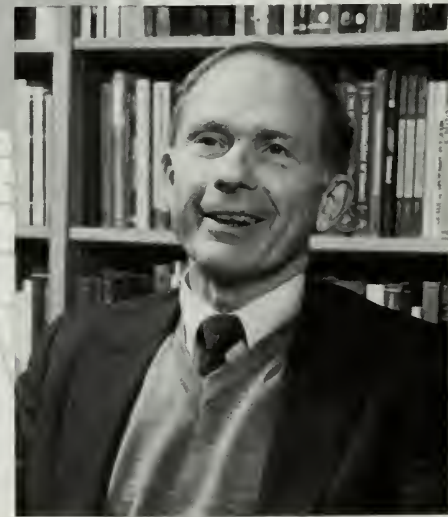
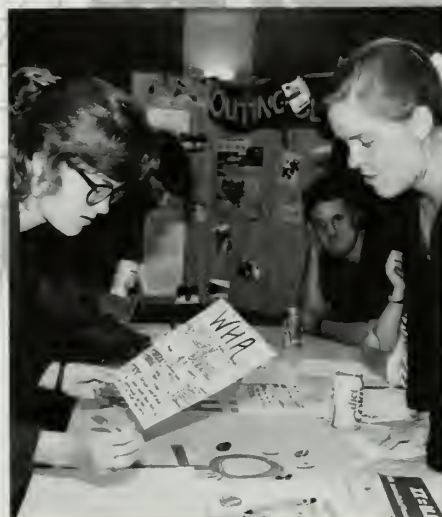


Photo by Ira Wyman

In his acceptance remarks, Tosteson expressed appreciation and respect for the award's namesake, and for the association: "I feel honored to participate in this annual remembrance and celebration of Abraham Flexner's contributions to medical education, and to higher education generally. The clarity of Flexner's analysis of the educational process and the courage with which he pursued reform have rightly made him one of the patron saints of this association. Each year this award in his name reminds us that helping young people prepare for careers in medicine and the medical sciences is a complex and poorly understood art worthy of the attention of the best minds in academic medicine.

"I am pleased to accept the 1991 Flexner Award with the understanding that it recognizes the many colleagues with whom it has been my privilege to work on these issues over the years: the students and faculties of the schools of medicine of Washington University, the University of Chicago, Duke University and my alma mater, Harvard, and many other institutions represented in this association. A special thanks to each of you."

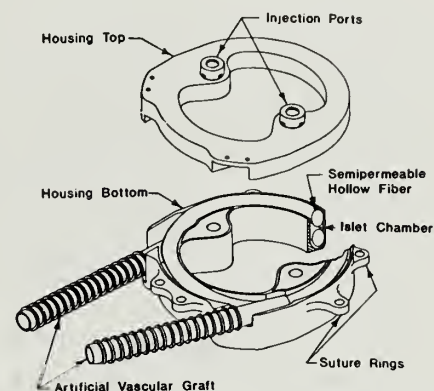
Tosteson, the Caroline Shield Walker Professor of Physiology, has been dean of HMS since 1977, coming from the Pritzker School of Medicine at the University of Chicago, where he was also dean. He graduated from Harvard College in 1944, and from HMS in 1948. He has served on the faculties of Washington University in St. Louis and of Duke University.

Progress in Diabetes Research

Progress on two different ways for restoring insulin production in diabetes was reported in *Science* by HMS researchers last spring. Reporting in May, a team led by Anthony Monaco '56 and Takashi Maki, MD at the New England Deaconess Hospital implanted in dogs an artificial pancreas, which produced insulin for as long as five months. And Denise Faustman, MD and laboratory technician Chuck Coe at the MGH reported in June the successful transplantation into mice of human islet cells that had been treated to evade rejection.

About 10 to 12 million Americans either lack or do not effectively use insulin, and of those about 2 million require daily injections of insulin. Pancreas transplantation has proven successful, but has drawbacks: the supply of donor pancreases is very limited and, like all organ transplantation, necessitates the lifelong use of immunosuppression drugs, which have side effects too risky for the otherwise healthy diabetic person. As a result, much research is under way to find alternative means for restoring insulin production, such as transplantation of just the insulin-producing islet cells and protecting them from rejection without drugs.

The artificial pancreas device consists of a coiled hollow tube made from a selectively permeable membrane attached at both ends to vascular grafts. Islet cells are distributed in the space between the membrane tube and the device's outer acrylic housing. Blood flows through the membrane tube, allowing exchange of insulin and glucose between the bloodstream and the islet cells, but the membrane blocks out the larger antibodies and lymphocytes, preventing rejection. The Deaconess team collaborated with W.R. Grace Company, a producer of medical



Schematic of hybrid artificial pancreas.

devices and specialized membranes, and Biohybrid Technology Corporation, which isolates and cultures islets and other cells.

The researchers had to implant two devices to achieve sufficient insulin production, but supplementation by injection was completely unnecessary in six of the seven dogs with successful implants, for up to five months. "This is the longest demonstration in a large animal of the transplantation of islets without immunosuppression," says Monaco.

The cross-species islet transplant technique developed by Faustman and Coe enabled them to inject human islet cells into mice without rejection for more than 200 days. To render the islets unrecognizable to the mice's immune system, they were pretreated with antibody fragments missing the tail region, the site where recognition of something foreign usually takes place. Function of the fragment-treated islet cells was verified by measures of human C peptide, a byproduct of insulin production.

Many obstacles remain before either technique is ready for human trials. Monaco hopes to be ready in about two years, and Faustman estimates that human application is five years away.

Campaign Report

THE CAMPAIGN FOR THE THIRD Century of Harvard Medicine has raised \$186.9 million, exceeding its goal of \$185 million. These figures are as of July 1, 1991, so there can be only better news ahead, when the capital campaign comes to an official close on December 31, 1991.

"More than five years ago we set out on a search for the resources to assure that the third century of Harvard medicine could begin on a stable financial base," comments Dean Daniel Tosteson '48. "It is an enormous satisfaction to me that we have succeeded in this effort."

The dean expresses his thanks to each and every person who contributed to this venture, and says that he is particularly grateful to Campaign Co-chairmen Lewis Thomas '37 and Colman Mockler Jr., and to Ellen Gordon, who succeeded Mockler after his untimely death in January of 1991.

"It has been a special privilege for me to work with our alumni throughout this country during the campaign," says the dean. "By any measure—percent of the alumni who participated or total dollars contributed—the response was extraordinary. I hope that we can sustain and strengthen the bonds among us during the years ahead."

Alumni gave almost 30 percent of the money raised, far exceeding expectations. "This is an absolutely staggering contribution," says Dean for Medical Education Daniel Federman '53, co-chairman of the National Alumni Campaign Committee.

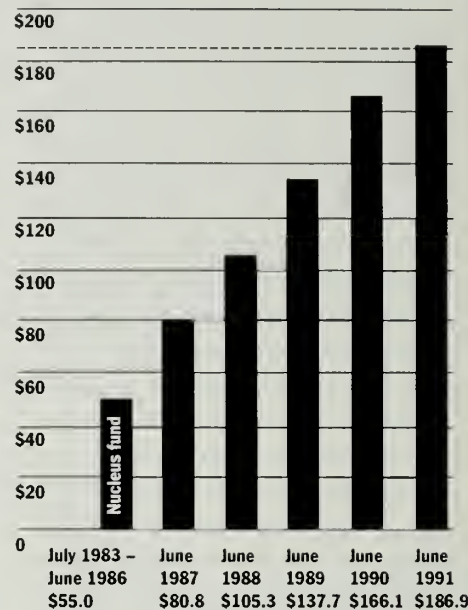
"Donors to universities always ask what your own alumni are doing for the campaign, and we can proudly say that our alumni have been magnificent."

Alumni served in many capacities, points out Federman. Some served on the national committee, some on the regional committees, and some served through the generosity of their gifts, or by calling other alumni. "This is particularly extraordinary coming at a time of national recession when doctors' own economic lives have been impacted by changes in health care. The way alumni of this school gave of their time and their pocketbooks will benefit future students of the school and the future patients of the nation. I truly believe this exemplifies the kind of dedication to others that brought us into medicine as a career."

Perry Culver '41, the other co-chairman of the alumni campaign, points out that more alumni were involved in this campaign than in any other. "It was an exciting and moving tribute to the support and love of the school that our alumni have." The regional campaigns were so successful, he says, that many of the regional groups plan to continue to meet.

Campaign for the Third Century of Harvard Medicine

dollars in millions



The Campaign raised \$186.9 million in gifts and commitments as of June 31, 1991, exceeding the Campaign goal of \$185 million.

The breakdown of giving by constituency groups is as follows, as of July 1, 1991:

\$ 54,695,000	Alumni and associate alumni
3,980,000	Alumni patients and contacts
39,788,000	Friends
363,000	Parents
56,784,000	Faculty patients and contacts
31,294,000	Corporations and foundations
\$186,904,000	Total

The complete report of campaign results will be announced at a gala celebration on March 6. In the meantime, a round of applause for all involved.

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President's Report

by George M. Bernier Jr.

THE ALUMNI ASSOCIATION OF Harvard Medical School, through its elected Alumni Council, has served a plethora of roles for the school. It has functioned as an organization that has supported the school morally, politically and financially; it has supported very specific programs of the school; and it has served at all times as a voice of conscience.

As an example, over the last two years the Alumni Council spearheaded an effort to assess perceived physician dissatisfaction with the environment confronting medical practice. In what began as an effort to explore the roots of this dissatisfaction, a landmark study in fact found that physician satisfaction was much greater than anticipated. While areas of dissatisfaction were clearly identified, and not minimized, in fact the graduates of the Harvard Medical School continue to enjoy their profession.

The results of this study formed the backdrop to a most exciting and illuminating Alumni Day on the Quadrangle last spring. Bob Goldwyn '56, then president of the Alumni Association, deserves great praise for the even-handed nature in which the assessment of our graduates was carried out and portrayed.

During the last several years another recurrent theme, the high cost of medical education and the additional high cost of financing that education, has been accorded much discussion in the council. In particular, members of the council have expressed concern about the impact of debts of \$50,000 to \$100,000 and higher upon young physicians. In particular, the worry is that such debts may influence residency choice, and make an impact upon the type of training, the location of practice, and the selection of a subspecialty career rather than one of primary care. Perhaps even more fundamental, we have been concerned about the impact of debt upon societal expectations, upon who chooses medicine as a career, and very specifically, who chooses to attend Harvard Medical School.

These discussions were crystallized in a suggestion made to Dean Tosteson that a group of diverse individuals be convened representing not just medicine, but individuals with backgrounds in finance, in public policy and other areas. Dean Tosteson warmly received this suggestion and in June of 1991 appointed a task force of his choosing.

Dean Tosteson appointed three members of the Alumni Council: Bob Goldwyn; Nancy Rigotti '78, counselor (third pentad); and me as chair of the task force. The other members include: Carl Walter '32, former head of the Alumni Fund; Peter Slavin '84, a young physician with a great deal of experience in the economics of medical training; William M. Crozier Jr., chairman and president of BayBanks, Inc; Charles Gifford, president of Bank of Boston; Phillip J. Nexon, Esq., of Goulston and Storrs; Thomas O. Pyle, former chief executive officer and chairman-elect of Harvard Community Health Plan; George W. Siguler, managing director of Mitchell Hutchins Institutional Investors Inc.; Theresa J. Orr, assistant dean for student affairs and Howard H. Hiatt '48, professor of medicine at Brigham and Women's Hospital.

The task force has met on two occasions and is wrestling with the issues outlined above. We hope to have some preliminary answers to those questions soon.

George M. Bernier Jr. '60 is dean of the University of Pittsburgh School of Medicine.

Erratum

When sorrows come, they come not single spies, But in battalions.

Hamlet

First apologies to Robert J. Glaser. Our masthead proves we know how to spell his name, but our eagle eyes did not pick up a typo in Bob Goldwyn's President's Report last issue. When Dr. Goldwyn announced that Dr. Glaser was the new president-elect of the Alumni

Council, we created a new person named Robert J. Glaster.

Another human error, this one not our fault! Due to "operator error" when the magazine's pages were being bound at the printer, some copies of the magazine have pages missing or out of order. Please call

us at 617/432-1548 if you need a new one.

The Night the

*On the following
pages, four physicians
who were there
November 28, 1942
at the Massachusetts
General Hospital
recount their
experiences.*



UPI/Bettmann

Grove Burned



A Hush on the Brick

by Thomas H. Coleman

I WAS A SECOND-YEAR MEDICAL student when Saturday night, November 28, 1942, we came out of Jake Wirth's tavern at about 11:00 PM and smelled the smoke. We could see it drifting by, apparently from Park Square. Sirens were screaming and moaning. We thought it must be a big fire, but standing on the curb about to

Cocoanut Grove!"

So that was it. I had been to the Cocoanut Grove one evening the year before with Trygve Gundersen '26 when he was showing me the town. The Grove was on the street floor but I remembered a subterranean bar and lounge that was dark except for blue ceiling lights and a spotlight on a dapper piano player singing such risqué ballads as "The Adventures of Clarissa the Flea." The Melody Lounge was decorated with papier-mâché grass and palm trees, rattan furniture and other decor of the South Seas. It was very crowded and smoky. We hadn't stayed.

On the morning of the fire, the Boston College football team had been number one and headed for the Sugar Bowl. But that afternoon, Holy Cross had beaten them 55 to 12 and the celebrations were all over town in nightclubs and restaurants. Hundreds of college kids, most with their families, in joy or defeat, were having a great party.

The Cocoanut Grove had just opened a new addition; the Boston Fire Department had inspected it the previous week. The club was crammed with nearly a thousand people—at the tables, the bar, on the dance floor. Some were soldiers and sailors about to go overseas to fight. The Russians were killing thousands of Germans at Stalingrad. The Japanese had retaken Attu Island in the Aleutians. The Italians had just claimed to have shot down 20 Allied planes over Tripoli.

While we had been at Jake Wirth's, Mickey Alpert's orchestra and his showgirls were on upstairs at the Cocoanut Grove. Downstairs in the Melody Lounge at about 10:20 PM a →

*In that desperate
ritual everyone did
his work silently...
a nightmare acted
over and over.*

step down, we were unprepared for a Railway Express truck that came squealing around the corner almost on two wheels. It lurched so close that we stepped quickly back. The truck raced away toward Tremont Street, rolling and swaying, with four pairs of legs sticking part way out of its open back.

We looked at each other in a moment of disbelief and then followed, walking, running, across the Common, along Charles Street to the Mass. General, amid streams of trucks, ambulances, taxicabs and station wagons—any vehicle that could carry two or three bodies. They passed us again empty on their way back for two or three more. People were running toward us and past us on their way to the fire: "There's a big fire! You're going the wrong way. It's the



UPI/Reitmann

Performance under fire

by Frances D. Moore

As we close in on the 50th anniversary of Boston's disastrous Cocoanut Grove fire, Thomas Coleman's sharp recollections set the tone for remembrance. On that particular Saturday night, Charlie Burbank '38 and I (of the west surgical service at the MGH) were on duty, in charge of the emergency ward. In the early evening everything was remarkably quiet. We had retired to relax in our room in the

Corridor



"Moseley Flats" (most unusual). We were listening to a football game on the radio. Then came the whine of an ambulance. "Well, we better go down." As we put on our white coats, there was another whine, then another, then several. We did not even comment to each other on our speculations, but broke into that determined trot of the pressurized resident.

Already, the emergency ward was a remarkable scene, never repeated since. Although it was then still only minutes after the ambulances started to arrive, the dead were already laid out in rows on the floor of

the long hall. Many were fully dressed and totally unburned. The living were often gasping and were on beds in the side rooms—again, many unburned. Many faces—both of the quick and of the dead—were deeply cyanotic, others bright cherry red. Many of these died within an hour or two, despite best efforts with oxygen administration by any primitive method that came to hand.

Soon, Henry K. Beecher's anaesthesia staff arrived to civilize and systematize respiratory care, usually by "hand-bagging" respiratory assistance with an oral airway.

For the first few hours there were no treatment tags on the patients, who often required a move to one or several other locations. Overdoses of morphia were frequent and very threatening to those with respiratory tract injury. Furthermore, many patients were extremely anxious and worried rather than in pain; morphine was not too appropriate. I will not soon forget the anguished cries of a Naval officer who was in full dress uniform for the party, looking for his fiancée. She was not soon found because she was already dead.

Patients died of respiratory tract injury or just plain suffocation, the available oxygen having been used up in the combustion of the flamboyant plastic drapes. Many suffered carbon monoxide poisoning or the effects of the combustion products of paint and decorations, which produced a phosgene-like injury to the mucosal lining of the bronchial tree.

A total of 491 people were killed at the scene or died soon thereafter; 181 survivors were taken to several hospitals along with almost 300 bodies. Early on, 39 patients died in hospitals.

busboy stood on a chair and lit a match to see where to replace a light bulb in a paper palm tree. At first there was a little smoke. Then, an eruption of flame caught the paper decorations, burst across the ceiling and up the stairs to the dance floor and bar where more decorations exploded in flames. The lights went out.

In the dark the club filled with dense smoke and searing gasses. People were choking, screaming and trampling over the fallen in two groaning masses fighting for the two exits. The main exit on Piedmont Street was a revolving door, which was immediately jammed by people falling and others trying to clamber over them to get out. None of them made it. While we were running toward the General, firemen were finding scores of the dead behind the door, mounds of them burned, asphyxiated and crushed. At the Broadway exit a roaring torch of flame shot 15 feet straight out the door and into the street, burning dozens of people to death as they were on the edge of escape.

All of this had taken only eight minutes. Survivors were yelling and fighting to get back inside the club to rescue a friend, a fiancée, a brother. Coast Guardsmen were giving artificial respi-

ration to people lying burned in the street. Firemen were dragging people from the doorways, carrying the evidently dead ones to piles of bodies on the sidewalks to make room for those still breathing to be loaded into ambulances or taxis. Three died in taxicabs on the way to hospitals.

When we arrived at the Mass. General, the emergency entrance was clogged with trucks and taxis unloading bodies, some on stretchers, some just carried in by drivers. We went in through the White lobby. I was given a cap and mask, which made me feel I should do something useful but I wasn't sure what.

I couldn't have done anything just then anyway because I was staring transfixed at what was happening in the entrance. I stood back near the admissions counter, just behind four residents who were poised at the entryway. Stretchers bearing victims arrived two or three at a time and were lowered to the floor. The doctors were cast in a grisly ballet: kneeling, examining, motioning the victim to the right or left, standing, kneeling. Examination and decision took 10 or 15 seconds.

Stretchers bore young women in evening dresses, young men in tuxe-

dos, older men in business suits, women in their party clothes and jewelry. Most were not breathing. Many were badly burned. On one stretcher a portly man, well-dressed in a dark suit, white shirt and flowered tie, was carried in and set gently down. The skin of his fingers was blistered and curled up in thick gray rolls, exposing his knuckles. His face was bloated into one huge blister with only slits for his eyes and mouth. A resident knelt beside him for a deft examination, motioned his bearers to take him to the left, to the Brick Corridor.

Bodies kept coming in for as long as I stood there, probably for eight or ten minutes. Occasionally a person would be motioned to the right, upstairs to the surgery floor. The hush was impressive. In that desperate ritual everyone did his work silently, in pantomime, unreal—a nightmare acted over and over. The sirens were still moaning.

I felt useless and in the way, and a little queasy, so I went upstairs. I was given a scrub suit. A senior physician handed me a stethoscope and assigned me to taking blood pressures. He was also taking blood pressures.

In one of the rooms lay a badly burned woman: her hair singed and her

At the MGH 39 early survivors were admitted, only 10 with extensive surface burns; there were 5 tracheostomies. Seven of these patients, admitted in critical condition, died in the first three days. Some of the remainder required prolonged hospitalization, the last being discharged in April.

Hectic hours, weeks and months followed. Respiratory tract injury was universal. Tracheostomy rather than tracheal intubation was the rule. We lost some patients very early, but respiratory tract difficulties continued to complicate

our care for many weeks. Burn wound sepsis was inevitable; burn wound coverage took months. Tiny amounts of penicillin became available for the very first time during this long and stressful period. Sulfonamides were the staple, and there were many renal complications. Massive infusions of fluids and plasma were soon discovered to be very dangerous in those with pulmonary injury. Massive infusions of nursing and surgical care, on the other hand, made survival possible.

During the prior year, under

the direction of Oliver Cope '28, some research had been done on the pathophysiology of burns. The pace of this research picked up. Then, about a year after Pearl Harbor, this work was performed under contract with the United States Navy. Sophistication in burn management was certainly there, and the lessons learned formed the basis of a series of reports on the Cocoanut Grove burns, occupying an entire issue of *Annals of Surgery*. This entire effort, both the organization of the hospital, the staff, the research, and the published

reports were under the direction of E. D. Churchill (Class of 1920), John Homans Professor of Surgery and chief of surgical services at MGH.

Of all the lessons learned, none surpasses the description, analysis, study and treatment of the respiratory tract injury of burns. While the injuries were severe, we later found that with recovery there was no trace of residual pulmonary damage, rather analogous to the normal renal function seen about a year after sublethal post-traumatic renal insufficiency. A new focus on this pulmonary injury,

face smudged with charred skin over her cheekbones. She wasn't breathing. To my unpracticed eye she was dead, and I supposed she had died within the last few minutes. I listened anyway and was surprised to hear her heart. While I was trying to take her pressure, she took a breath. In the next minute she took three more. Apparently she had been given a heroic injection of morphine en route from the fire.

Someone in a white uniform wheeled in an anesthesia machine with oxygen tanks on it and clapped a mask to the woman's face. I thought I smelled ether. There was a tank of it on the machine and the wrong valve was on. Ether was not what this woman needed. Did my "Wait a minute!" save her life? I hope so. I never knew.

In another bed a woman not so badly burned lay on her side apparently asleep. When I reached to take her pulse, she opened an eye and looked up at me in my cap and pale green scrub suit, which I had been hoping made me look sufficiently professional. She had a wonderfully heavy European accent. "You a docta? Und only sixteen year-old!" She closed her eye, I took the blood pressure. We would both survive.

As we went among the survivors, we

Did my "Wait a minute!" save her life? I hope so. I never knew.

heard that there were hundreds dead: that six or eight hundred people had been packed into the club built to hold only two or three hundred. Hospitals were full of the burned and morgues were filling with the dead.

Nearly all of the 40 beds on the surgery floor of the White Building were full. Nurses and doctors were there now in force. I went down to the Brick Corridor to a scene I would never forget in all the later years and hundreds of times I would walk there. When I first saw it I stopped short, incredulous. I remembered only the two or three dozen dead that had come in while I had stood in the emergency room, but here in this dimly lit vault lay what must be a hundred, side by side, row on row, covering about half the brick floor from the White Building corridor to the hallway leading to the Bulfinch Building. They

were still uncovered. Most were young. Women and girls dressed for a party evening—beautiful in evening dresses, their flower corsages at their shoulders not even wilted—some young men with carnations in their lapels.

Someone had opened the windows along the benches, but there rose a sour smell of fire, and burned clothes and hair. For a fleeting moment though, I smelled the fragrance of gardenias, transporting me to a vivid remembrance of a college dance and a special girl I'd known. It was a vision so incongruous with the Red Cross volunteers, some younger than those that lay there, who stepped carefully among the bodies, bending and kneeling to look for a name or some other clue. It seemed impossible that two hours earlier these bright souls had been together at a party, now brought quietly together in this place—silent, still beautiful, never to be alive again.

Many seemed unscathed, just sleeping. It was their color. Their faces were bright with the blush of youth. "Carbon monoxide," I commented to an intern standing next to me. He gently explained that it wasn't monoxide, "Just oxygen coming to the surface of a first-degree burn."

"But their flowers aren't burned!" I

never really brought to the fore prior to this disaster, characterized the teachings and the writings of Oliver Cope for several years thereafter. If any good came of this awful event, it was in two categories: improved fire laws and improved care of the respiratory tract injury of burns.

As to the fire laws, a recent article by Casey Grant, "Last Dance at the Cocoanut Grove," from the National Fire Protection Association, is the best account I have seen of the actual fire: a drawing of the nightclub, photographs taken at the time, an analysis of the

exits and the challenge to the fire department.

As to the respiratory tract injury, I have tried to summarize this history, both before and after the grove fire, in a contribution to *Respiratory Injury: Smoke Inhalation and Burns* (Haponik, E. and Munster, A., Eds., McGraw-Hill, Inc., New York, 1990).

During and after this terrible night, the entire MGH—staffs, nurses, assistants, administrators, students, equipment, research and the structure itself (the White Building then three years old)—were put to a severe test. Their total perfor-

mance was unsurpassed and set a high standard for other hospitals in preparing for civilian disaster and the imminent apprehension of mass casualties from enemy bombing, already a reality in London.

The years of the nuclear threat were still a decade away, the first atomic bombings of Japan still two and one-half years in the future. The respiratory tract injury of burns was not only recognized and emphasized by this event, and by Oliver Cope's writing and teachings, it was here to stay.

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said. Later we learned that in fact carbon monoxide poisoning was how most of these people died.

For the next few days we students couldn't stay away from the Boston City or the General because we had the privilege of watching great hospital staffs handle a disaster. It was almost too much for them in the first hours. But, as Oliver Cope points out in his account of the fire, the MGH was supplied for a wartime disaster with enough medicines and intravenous fluid sets for 200 casualties. If the fire had come an hour later, however, they might not have done so well. At 10:30 PM the nurses for the night shift had arrived and the nurses of the afternoon shift stayed for double duty. For some victims in the crisis of the first hour, this incredibly fortunate concentration of nurses was the gift of life.

We saw the Mass. General surgeons treat burned people according to the

best practice of the time. Their arms and legs were coated with sterile strips of boric Vaseline gauze and wrapped in heavy pressure dressings of elastic bandage. They looked pathetically helpless, like the mummy-wrapped patients in cartoons.

We followed the greats, Oliver Cope and Champ Lyons, on rounds for the latest word. There were so many residents, interns and nurses that some rooms were too small for everyone to fit. I found I could slide along the wall and stand at the head of the bed behind the patient and not take up much room, but still hear everything.

I was standing behind one woman who was propped up in her bed recovering from severe burns on her back and chest. For some reason her torso had been encased in a plaster cast. Lyons was at the foot of her bed expounding on burns and plasma and sulfadiazine when I happened to look

down at the back of the patient's neck. A maggot curled its way up to appear at the edge of the cast, and sensing daylight turned around and curled its way down again to its dark ferments.

Afterward in the corridor, I walked alongside Lyons and said I didn't know whether he knew, but there seemed to be maggots inside the lady's cast. He turned to me with astonishment and delight and kept walking. "There are? That's great! Nothing better to clean up a wound. We found that out in the First World War." I had heard of that. But now? At the Mass. General?

The *Boston Daily Globe* reported that 491 people died that night and over the next few days. At the hospitals, 300 of them were dead on arrival; 191 arrived alive, later to die; 440 survived. The Mass. General received 114 people in two hours. Only 39 were sent to the sixth floor of the White Building.

I will always see the 75 who lay together, and alone, in the Brick Corridor, waiting. I knew that friends of theirs or even their fathers and mothers might be lying in some other place like this, or if they were alive could not yet know what I knew, that in this evening of celebration their sons and daughters were dead. I couldn't comfort myself, or anyone.

The experience has made me a little overcautious and preoccupied in any celebration, feeling on guard in restaurants with my family, looking to see where the exits are, taking a little ridicule from my daughters when I sent them off to school with 20-foot knotted ropes in their luggage, insisting they tie them to a radiator near a window in the dorm. I hope I have been better at supporting a patient who has lost family or a friend in sudden death. As for myself, I feel especially fortunate to be alive. Perhaps I enjoy any celebration more deeply after all. ❧

Thomas H. Coleman '44 is an internist in private practice in Denver.



The End of the Tannic Acid Era

by Oliver Cope

In 1983 Oliver Cope was interviewed on videotape by Earl Wilkins '44 as part of the "Leaders in American Medicine" series, sponsored by the Boston Medical Library. This account is excerpted from that interview. Cope commented recently from his home in Lincoln, Massachusetts about his involvement in the aftermath of the fire: "It was truly a memorable and meaningful experience for the students and staff in patient care and the need for preparation for catastrophies should they occur. I must say that burn research took on a new dimension. We have come a long way in the care of burn patients since the Coconut Grove disaster."

ONE FEBRUARY MORNING OF MY senior year, in 1928, when I was a tutorial student at the medical school, there was a disastrous explosion in the Beacon Oil Company in Everett. Some badly burned men were brought hurriedly to the emergency ward of the Mass. General, in the basement of the old Moseley Building. I was walking along the corridor and somebody stopped me and said, "You, you're interested in surgical things. What are you doing here? Go down and see what's going on in the emergency ward."

I went down without any duty assigned to me, just to look. It was pandemonium. All of the surgical staff, the interns and residents, the students on duty were all down there with all the nurses available, taking care of some 31 patients.

That was the tannic acid era. Two years before, a group at the Detroit Hospital or the Henry Ford Hospital, if I'm right, said tannic acid was the way to treat burns. Treatment was to take the bleb off the burn and tan the underlying surface. That was important because tanning would fix any noxious substances in the burn wound right away, and then would provide a sort of tanning cover that protected the wound from then on. This treatment swept through the country.

I remember the old emergency ward had five little operating rooms,

I'm sure Joe Aub must have gone and talked to Pete Churchill about this strange way of handling burns.

and there were some bathrooms and bathtubs for giving patients a bath. All of them were filled; I remember one most vividly in which there was a man in the bathtub. An intern and a nurse were debriding him, taking off the blebs, and the nurse was pouring tannic

acid on him. I came back a little later to look, and he had died—no fluid. All the attention was riveted on the burn wound. Here were these poor men pouring out fluid from their burned surfaces, and they were dying for lack of general physiologic attention. Well, that stuck in my mind.

Then a couple of other things happened. I don't remember quite how it was that I observed that when I burnt myself, if I left a bleb roof intact and protected it, it healed. I didn't need to take off the bleb cover and tan it, but just left it alone.

About 1935, while I was a young member of the staff, I got a call from my sister (Joe Aub's wife). Their three-year-old daughter had pulled a hot pot of coffee over on herself and burned her hand and the back of her wrist. What should she do?

I could hear the child crying over the telephone. I said, "Put her hand in cold water." That's comforting. We all know that. And I said I'd come out. So I went to the emergency ward and grabbed a big pot of Westerman's ointment, a vaseline preparation, and a lot of sterile bandages, and hustled quickly out to Belmont. I arrived to find the three-year-old sitting up right next to the sink with her hand in a yellow mixing bowl with the cold water tap running in. She was perfectly contented, and her mother was sitting there beside her, reading to her.

I did nothing more. There were blebs already. I piled the grease on,

bandaged between the fingers as best I could, and put on an outside bandage and left.

I'm sure Joe Aub must have gone and talked to Pete Churchill about this strange way of handling burns. And he talked to others—he was at supper somewhere, probably at the Harvard Club. This was unorthodox treatment of his daughter and very worrying. So the next morning there was a consultation. I tried to keep the chief of service from undoing the bandage. I wanted to keep it sterile. After all, it had been partly sterilized by good hot water and the water was sterile under the tap. We shouldn't see bacteria if we just left it alone.

The chief kept getting in, and I kept trying to keep him from getting in. Finally I won. It was obvious that at least one major bleb had broken because it was gooey at the edge of the bandage. We got outside and he shook his head and said, "Gee Ollie, I think you should attend that." Now of course I wouldn't be telling the story to you now if it hadn't come out beautifully. Hot water on a surface that's not covered by cloth passes quickly and causes a second degree burn, rarely full thickness. I must have somehow known that then. Well, of course, as this case came out you couldn't tell which hand was

burned. Then we treated some more patients this way.

Then the next step was that I was still interested in the adrenal. Under Churchill I was still doing experiments in adrenal insufficiency in the dog: measuring the lymph concentration and lymph flow in adrenal insufficiency. There was a meeting of the Society of Clinical Surgeons at the MGH in November 1941, a month before Pearl Harbor. I presented the evidence we had of the relationship of the adrenal to shock, and the support needed in the treatment of shock.

Pearl Harbor came, with its vast numbers of casualties and inadequate personnel to care for them. Isador Ravdin, MD of Philadelphia, who had been at the MGH meeting, was sent out by the National Research Council as a chairman of the committee to study what had happened in Pearl Harbor.

The major casualties at Pearl Harbor were burns from the Japanese firebombs and the fires on the boats and on land—on the civilian population as well as the military. Ravdin said that they were still dressing the burns a day and a half after the injury. There were so few trained personnel to take care of so many patients.

Dr. Ravdin remembered the paper I'd done on adrenal and shock and

thought I might have something to contribute. So I went down to Philadelphia and told him what I'd seen in 1928 as a student. The staff of the MGH were overwhelmed trying to care for 31 patients. Furthermore, a surgeon in Hartford, Donald Wells, had taken some tannic acid and injected it into rabbits and found the rabbits didn't like it at all. It was the first bit of evidence that tannic acid didn't stay put in the wound.

Dr. Ravdin asked me to come to the meeting of the NRC in Washington just a month after Pearl Harbor, January 7. He asked me to be the secretary of that committee and proposed that we change our attitude toward the care of acutely burned patients so that instead of requiring four or five trained personnel to care for one patient, you could have a plan where one trained personnel might be able to care for 10 patients.

I went home from Washington with money from the National Research Council to test this concept, and we organized a review of burns. By the time of the Cocoanut Grove fire, we had studied 73 burn patients—some badly burnt, some minor burns. We'd protected the blebs so they didn't rupture and then cultured—stuck a needle in the side and taken out the fluid—to

What we learned

by Bradford Cannon

I am fascinated by Thomas Coleman's very graphic and human account of that terrible night in the EW; the tragic scene in the Brick Corridor where carbon monoxide poisoning masqueraded as the "blush of youth."

A year earlier I had returned to Harvard and the MGH surgical staff after completing my training in plastic surgery at

Barnes Hospital in St. Louis. Oliver is correct that in the year before the Cocoanut Grove disaster we had proved convincingly that tannic acid and the triple dyes recommended for topical application were injurious to viable epithelium and delayed the healing process. But word sometimes gets around slowly and it surprised some, even surgeons at the MGH where this work had been done, that there was no mention of tannic acid in the EW that night.

I remember well the arrival within a few days of a host of "experts" from Washington who were so impressed by the performance of our staff that they published directives on burn management based on our experience. Rumor has it that quantities of tannic acid were discarded by the armed forces.

Not long after the Cocoanut Grove experience I left for the Army and Valley Forge General Hospital. There we concentrated our efforts on prompt closure of the open burn wounds to control the late dev-

astating sepsis. Later reconstruction and rehabilitation were carried out. The early treatment of the burn patient, management of fluid/protein loss, shock and protective dressings were done before evacuation to our hospital in Pennsylvania.

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see whether a bleb when protected really did remain sterile.

One other thing we knew by then. There was a patient treated at the MGH with a salve that contained one of the antibacterial substances. The extensively burned patients had this smeared over their burns in an ointment. One man received so much of the sulfadiazene that he was poisoned by it and died. That was very important. You had to be careful not to smear a drug on a wound without expecting it to be absorbed. Tannic acid was being absorbed, and so was the sulfadiazene.

So we put this together and a week before the Cocoanut Grove a woman who was badly burned came to the MGH. Her treatment was carried out by the surgical service house staff. The visiting men were there and agreed this was the thing to do should a disaster come.

Well eight days later came the Cocoanut Grove, and the West Surgical Service was on duty. I was called in from Cambridge and the West Surgical Service was trying this simplified treatment on the patients who were being brought in. In less than two hours, 114 patients were brought to the MGH from the Cocoanut Grove disaster. Many of them were coughing, and several died within a few minutes of arrival.

Churchill and Faxon were in on this plan too, and they saw that the thing to do was to have patients in the ward area with the fewest sick patients evacuated to other available beds in the hospital. That floor, which happened to be the White 6, was assigned to the burned casualties.

The National Research Council came to see how the MGH was doing. They compared the MGH with the Boston City Hospital, which had a bigger load of patients and was submerged with trying to use tannic acid and the triple dyes. One of the staff of the BCH had devised triple dyes.

Part of the MGH study done between Pearl Harbor and the Cocoanut Grove was carried out by Brad Cannon, the



Boston City Hospital patient ward.

plastic surgeon. When skin grafts were needed, he took carefully measured dermatome grafts. Then he treated sections of this donor site with different things: triple dyes, just vaseline or tannic acid. He found that what healed most rapidly was the area covered by just plain bloodclot. Vaseline was almost as good. Tannic acid delayed the healing. The triple dyes were the worst of all.

When the Cocoanut Grove patients were being cared for, we surgeons were so set on looking at the care of the wounds that we didn't think about other things. The medical people came into the act because of the patients' coughs from the irritation of the gas giving them trouble with their lungs. One 16-year-old girl, for example, had one lung blocked off. The medical fellow, after a week of this, hit her on the back and she coughed it out. They were intent on the lungs.

The Social Service realized the difficulty the patients were having emotionally. The patients could hardly talk. There was one man who had gone to the Cocoanut Grove with his mistress. She had died, he had survived, and then his wife came in to see him. He couldn't talk. And there was a group of six from Keene, New Hampshire: a valedictorian girl and a valedictorian

boy of another family, and their parents. The survivors were the girl and the mother of the other family. How did the mother feel and how did the girl feel? And we weren't paying attention. The Social Service saw this. They insisted that Stanley Cobb and Eric Lindeman come and see them.

Everybody thought that the patients were depressed. It wasn't long before tests showed that they were behaving like manic depressives; they were manic and Cobb and Lindemann had to get them to cry. And suddenly they began to relax and be able to talk.

Now this was one of the discoveries, and I think it's a principal one that's been neglected. The same thing almost certainly happened to the survivors of Hiroshima and Nagasaki. They were so upset they couldn't talk about the loss of their families and the other people. ❧

Oliver Cope '28 is HMS professor of surgery emeritus and honorary surgeon at MGH, and was president of the American Surgical Association in 1962. His many accomplishments in endocrine surgery, notably on the thyroid and parathyroid, in surgical education, the management of burns and the treatment of cancer of the breast adorn a distinguished career.

From Eclectic Beginnings

by Arnold S. Relman

JOSEPH GARLAND, WHO WAS EDITOR of *The New England Journal of Medicine* from 1947 to 1967, was an outstanding pediatrician, an author and essayist of considerable ability, and a humanist born and bred in New England. He was Harvard educated, of course. He led the *Journal* through what I think most historians would consider its greatest period of growth and its metamorphosis from essentially a local journal to a world-class institution.

His successor, Franz Ingelfinger, described Garland as “the master of whimsical understatement” and that in itself is an understatement. Few medical editors used the English language so gracefully and with such great effect. And after he retired as editor he served as president of the Boston Medical Library. Joe Garland was one of the distinguished figures in the history of Boston medicine, and I feel honored to be giving this lecture in his memory.

The New England Journal of Medicine is currently in its 180th year of continuous publication—the oldest surviving medical journal in the world and one of the oldest medical institutions in the United States. The logo of *The New England Journal of Medicine* tells much of its history. There are four dates on the logo—1812, 1823, 1828 and 1928. In 1812 publication began as *The New England Journal of Medicine, Surgery and the Collateral Branches of Science*.

It was founded by a small group of

young Boston physicians who were destined to play a major role in the history of medicine in this city and in the country. The two central figures were John Collins Warren and his friend James Jackson. At the time they were both 34 years old. In 1811, the year before, they had obtained a charter for a new hospital in Boston that was to be called the Massachusetts General Hospital.

John Collins Warren, the key person, was the son of John Warren, who was the first member of the Harvard Medical School faculty and a founding father of that institution.

James Jackson was subse-

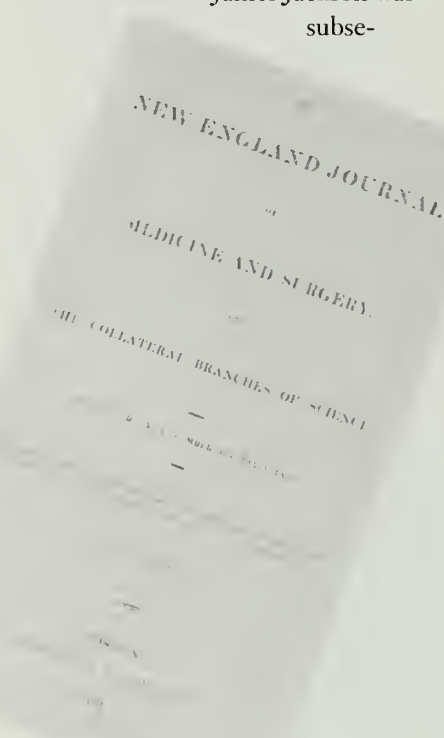
quently co-founder of the Boston Society for Medical Observation, which was the progenitor of the Boston Medical Library. They were also joined by three other youngsters, Jacob Bigelow, who was 25 years old, Walter Channing, who was 26 years old, and John Gorham, who was 29. The journal they started was at first a quarterly, and of course it was a general journal. All medical journals founded early in the 19th century were general journals.

The journal published anything that might be of interest to physicians of that day: clinical observations, medical news, botany, geology, meteorology and miscellaneous notes from here and there. Reading an account of how they edited their journal made me wish that

I had been born in an earlier era. The editors conducted their business

by meeting monthly for dinner, at which time they discussed a few manuscripts. In the fullness of time, when they had enough material, they would publish an issue. This was approximately four times a year.

The second date on the logo, 1823, was the year in which an enterprising young physician in Boston by the name of Jerome van Crowninshield Smith founded a weekly newspaper called *The Boston Medical Intelligencer*. (And by the way, that was the same year in which Thomas Wakley founded the *Lancet* in London, which is the second oldest surviving medical publication.) *The Boston Medical Intelligencer* was a great success, and this bothered the propri-



etors of *The New England Journal of Medicine, Surgery and Collateral Branches of Science*.

So in 1828 they did what any red-blooded Yankee businessman would have done: they bought out the competition. Warren and Channing, with some help from a new young colleague named John Ware, who subsequently became a co-editor of the journal, raised the princely sum of \$600. With this they bought out the *Boston Medical Intelligencer*. They incorporated it into their own journal, named the new combined journal *The Boston Medical and Surgical Journal*, and they made it a weekly. The first issue came out in February 1828, which is the third date on the logo.

The Boston Medical and Surgical Journal survived by that name for a hundred years under a succession of editors, including such illustrious names as Francis Minot, David Cheever, J. Collins Warren (the grandson of the first editor) and George B. Shattuck. The latter had the longest tenure as editor and was described by Joe Garland as “a man who triumphed over a weekly deadline for 31 years—a record for endurance.” Having barely managed to survive a weekly deadline for 14 years, I share Garland’s admiration for Shattuck’s stamina.

In addition to these sober luminaries of Boston medicine, the *Journal’s* editors included some colorful characters. There was, for example, Jerome V.C. Smith, who became a co-editor when his weekly newspaper was bought out and incorporated into the *Journal*. Smith was a man of many parts and many interests. He was active in local politics, he was health commissioner of the City of Boston, he was a state legislator, and he ended up as the mayor of Boston when he retired from the *Journal*.

And then there was another editor named John Webster, who was a professor of chemistry at the Harvard Medical School and a co-editor of the *Journal* from 1812 until 1849. In the latter year he confessed to murdering

one George Parkman, a prominent Boston physician, apparently over a financial, not an editorial, matter. He was hanged publicly in 1850. So, despite rumors to the contrary, there is no special protection for editors of the *New England Journal*. If one of them in the future should commit murder, he or she will have to take the consequences, just like anyone else.

During its 100 years of existence, *The Boston Medical and Surgical Journal* published many notable articles, of which I will cite only a few examples. In November of 1846 Henry Bigelow published an account of the first operation under general ether anæsthesia, which was carried out in the Massachusetts General Hospital. Then a month later, in a glaring example of duplicate publication that was overlooked by the then editors of the journal, John Collins Warren, the founding editor, published an article on the same subject. In 1853 Gilman Kimball described the first abdominal hysterectomy with successful survival. In 1889 Reginald Fitz published the first clinical description of a new disease, acute pancreatitis, and in 1902 James Homer Wright, a pathologist at the Massachusetts General Hospital, published the first definitive description of blood platelets.

In 1921, a date not on the logo, the *Journal* was purchased by the Massachusetts Medical Society and I’ll have more to say about that in a moment. But in 1928, which is the fourth date on the logo, the *Journal* changed its name to *The New England Journal of Medicine*, evidently in recognition of the fact that medical enlightenment had finally extended beyond the environs of Boston, although not beyond New England.

The *Journal* initially described itself as the official organ of the Massachusetts Medical Society and, with commendable enterprise, also of the New Hampshire Medical Society, the Vermont State Medical Society, the New England Surgical Society, the Boston Surgical Society, the New



John Collins Warren



James Jackson



Joseph Bigelow



Francis Minot



George Shattuck



J. Collins Warren

England Pediatric Society and the New Hampshire Surgical Club. In subsequent years all those affiliations ended and *The New England Journal of Medicine* ended up simply as a publication of the Massachusetts Medical Society, owned and managed by the society.

There were a number of other more recent editors who must be mentioned: first of all Walter Bowers, “Uncle Walter” as he was known, who had been president of the Massachusetts Medical Society and editor of the *Journal* before it was purchased by the Massachusetts Medical Society. Bowers continued as editor for 16 years until 1937. Then there was Robert Nye, who edited the *Journal* for 10 years, from 1937 to 1947. He was followed by Joe Garland, of whom I have already spoken, who edited the *Journal* from 1947 to 1967. Garland was succeeded by the redoubtable Franz Ingelfinger, who served from 1967 to 1977.

Until Ingelfinger, every editor of the *New England Journal* had been cast in the same New England/Harvard mold. Many of the early editors were professors at Harvard. Later in the 19th century, they were eminent practitioners in the Boston area who were Harvard educated. Franz Ingelfinger partially broke that tradition. He had gotten his bachelor’s degree at Yale, but then he atoned for that by going to Harvard Medical School and doing his post-graduate training on the Harvard service at the Boston City Hospital. Joe

Until Ingelfinger, every editor of the New England Journal had been cast in the same New England / Harvard mold.

Garland said of Ingelfinger’s education—Yale College and Harvard Medical School—that Ingelfinger would have come out the same if it had been the other way round, but I don’t think so. Joe overlooked the fact that at Yale, Franz was an English major and a student of the legendary William Lyon Phelps. It was there that he became addicted to writing and reading good English. He remained all of his life a bookish man who loved the written word.

When I succeeded Franz in 1977 the mold was totally destroyed. I hadn’t had the benefits of any education at Harvard; I did my undergraduate work at Cornell, my medical education at Columbia and my residency at Yale. Whether, as editor, I ever overcame this handicap you will have to judge for yourself.

In any event, the *Journal* has flour-

ished in recent decades, as judged by many measures. Its paid circulation, now about 220,000 worldwide, is by far the largest in the world. Its articles are cited in the medical literature and reported in the media more frequently than those of any other medical journal, and its prestige and influence are unrivalled. The *Journal* is held in more libraries in the United States and around the world than any other international medical publication. And in business terms it is a very profitable enterprise.

During the last 40 or 50 years there has been a tremendous increase in the submissions of manuscripts. At the beginning of the Garland era, in 1947, the *Journal* received a little over 300 manuscripts, of which half were accepted. By the end of his tenure in 1967, it was receiving 1,500 manuscripts, of which 20 percent were accepted. In 1977, at the end of the Ingelfinger era, it was receiving 2,600 manuscripts, of which 12 percent were accepted. And in 1990, the next to last year of my tenure, we received over 3,500 unsolicited manuscripts, of which about 11 percent were accepted.

The winnowing out of all of this material—much of it very sophisticated scientifically, and some of it involving controversial issues of health policy, economics and ethical and legal issues—has required a tremendous increase in the complexity and size of the review process. Our in-house editorial staff has been enlarged to meet

this need. In the Garland era there was an editor and two or three part-time associate editors. Now, in addition to the editor-in-chief, there is an executive editor, three and a half full-time deputy editors, five part-time associate editors, two part-time statisticians and one part-time book review editor. As Garland and Ingelfinger did before us, we also rely on help from an editorial board and thousands of expert reviewers from all over the country.

A few years ago I estimated that the *Journal* was spending something on the order of a million dollars for the salaries of staff people involved at all levels of the review process. In addition, we used about 15,000 to 20,000 hours of outside, unpaid refereeing time. If you arbitrarily assume that the time of our referees is worth \$100 or so, a total of perhaps two and one-half or three million dollars was spent on the review process. The result of all this effort is probably the most rigorous peer review system of any medical publication, leading not only to the rejection of nearly 90 percent of submissions, but to the substantial revision and improvement of almost all the manuscripts that get through—a model widely respected and emulated by other journals.

The price of all this, in addition to the cost and time and effort, is an inevitable delay in making final editorial decisions and in the ultimate publication of accepted papers. For manuscripts that are published, the total elapsed time from submission to final acceptance varies tremendously, but the average is about four months, varying from a couple of weeks to a year or more. In addition to this time for review, decision-making and revision, another seven or eight weeks are spent in production. That can sometimes be shortened by half if we decide to publish an article as a special or preliminary report in the back section of the *Journal*.

The *Journal* has become a major

source of public information, almost a household word. Every week the popular media carry items about articles that have been published in the *Journal*. The public interest is enormous, and articles in the *Journal* often have great impact on government policy and the stock market.

While it's very pleasant to know that the *New England Journal* is widely noticed and respected by the public, this kind of attention does cause problems. It often leads to excessive publicity about preliminary and early developments that may be very interesting from a medical point of view, but are probably not worth the enormous attention given to them in the media. This sometimes makes the editors hesitant to publish provocative but preliminary or inconclusive articles, no matter what their potential scientific or clinical importance might be. It doesn't matter how cautiously worded the discussion and the conclusions in the *Journal* may be if the media show little restraint in reporting the news and the public are led to believe that something definitive and very important has occurred.

Even when the data appear solid, we

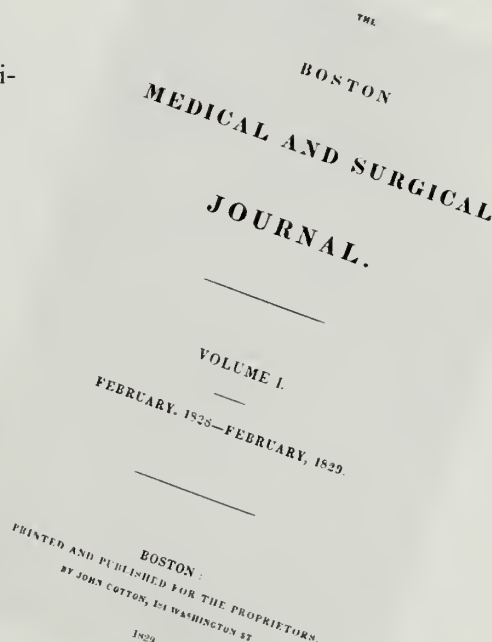
have had problems with the media. Efforts by the media to get the information early, even before it has been reviewed and accepted, or after it's been reviewed and accepted but before it's been published, have occasionally led to conflicts. Franz Ingelfinger established a rule in the latter years of his tenure, which said that the *Journal* would not consider for publication articles that had been released to the public or otherwise disseminated without prior discussion with the editors. With some modifications, I continued that policy.

I have always felt that quality and accuracy are more important than speed. No physician can base his or her practice on news stories. Physicians need to have all the available data, and these data should first be carefully checked and reviewed by experts.

On the other hand, there are a few occasions when the data are so urgently important that early dissemination after expedited review seems justified. We have therefore reached a compromise with the government and the media that allows for early dissemination of information that will later be published in the *Journal*, but only after review either by us or by some qualified public body.

I want to conclude with some remarks about the evolution of the relation between the *New England Journal* and its owners, the Massachusetts Medical Society. Between 1812 and 1914, the *Journal* was totally independent, although many of its editors had played important roles in the Massachusetts Medical Society and several editors were officers. In 1914 the *Journal* was in financial difficulty, and entered into an arrangement with the Massachusetts Medical Society to publish its transactions. This continued until 1921 when times really got bad, and the Massachusetts Medical Society decided to purchase the *Journal*.

According to the records it was purchased for the sum of one dollar, which



would qualify this as the best buy since Manhattan was purchased from the Indians for a reputed \$20 worth of trinkets. However, Joe Garland, whose historical scholarship is not to be ignored, said that he could not find any evidence that the dollar was ever paid.

At the time the *Journal* was purchased, members of the MMS were divided on what the relationship should be. Some thought the *Journal* should be an organ of the state medical society, carry state medical society business and, like other state medical journals, serve as a means of communication between the society and its members. But other members thought that the editorial control and the content of the *Journal* should remain essentially independent, as they had been for the 109 years before its acquisition by the society. They pointed out that there were many other state medical journals, but all had limited circulations and were of no interest outside the state. But *The Boston Medical and Surgical Journal*, even in its fledgling years, was beginning to be a national journal. It aspired to have an even greater influence on American medicine and many members wanted this goal to be pursued. They argued that the *Journal* could not be the organ of the medical society in the usual parochial sense and still remain an independent publication that would achieve national and international recognition.

At first there was an uneasy compromise, but later the separation between *Journal* content and MMS business became almost complete. The *Journal* initially published the proceedings of the Massachusetts Medical Society, but in a separate supplement mailed only to members of the state medical society. More recently, however, the proceedings of the society have been prepared and distributed to MMS members by the society's staff without involvement of the *Journal's* editors and with no visible connection to the *Journal* other than the statement that the pro-

ceedings are a *Journal* supplement. The *Journal* does continue to publish death notices of members of the Massachusetts Medical Society. For a long time it also published occasional reports of scientific committees that had passed the usual peer review, but gradually these have disappeared from the *Journal's* pages. This transition came about because it became increasingly evident that the *Journal's* success depended on its image as a totally independent publication responsible only to its readers and its contributors.

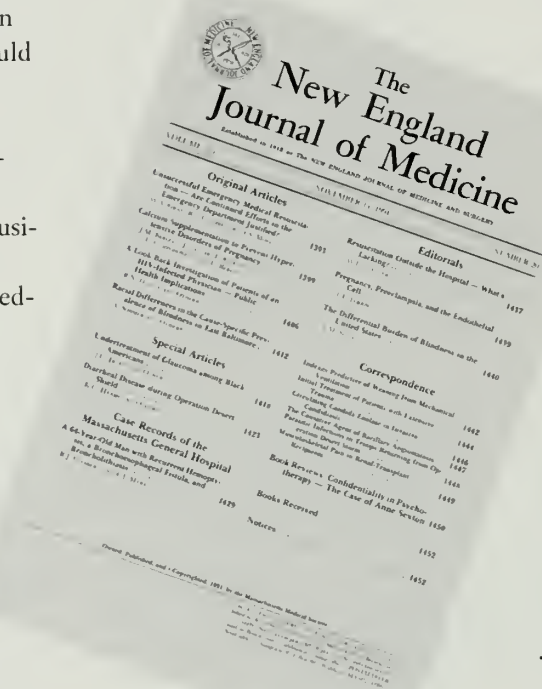
Editorials at first were unsigned and, until the end of the Garland era, it was hard to know whether the opinions expressed were official positions of the Massachusetts Medical Society or the opinions of the writer. To clarify that issue, Franz Ingelfinger decided that all editorials published in the *Journal* would be signed. It would henceforth be clearly understood that the opinions expressed were those of the writer only and that the *Journal* took no official, formal position on any policy issues. Ingelfinger wanted the *Journal* to be an open forum. He felt that it was important for it to represent all points of view, and that the medical profession would benefit from vigorous,

dispassionate, objective debate on all sides of issues. The *Journal* couldn't be an open forum if its editorial policy conformed to the current views of its owners.

The editor of the *New England Journal* thus began to assume a relation to the officers of the Massachusetts Medical Society comparable to the relation of the music director of the Boston Symphony Orchestra to its trustees. The trustees of the BSO hire the music director and, under the terms of his contract, can fire him. But in between the time they hire him and the time they might choose to terminate his contract, the music director is in charge of the orchestra. He hires the players, he chooses the programs and he decides how the music is to be played. The trustees carefully observe the result. If the orchestra makes great music and the critics and audiences are happy, then the music director continues in charge. But if the performances are not good enough, and the orchestra loses its reputation and prestige, then the trustees might want to consider looking for another music director.

That essentially has been the way it was during my tenure. There were a few occasions when officers of the Medical Society might have been briefly tempted to breach that separation, either by asking the editor to publish material of parochial interest or by over-reacting to complaints about controversial articles that were published in the *Journal*. But these have been relatively minor and infrequent breaks in an otherwise smooth and satisfactory arrangement.

Fortunately, wise heads have prevailed in the society so far, editorial independence has been maintained, and the *Journal* has flourished. I say "fortunately" because as recently emphasized a few years ago by the International Committee of Medical Journal Editors, editorial control by its owners would have disastrous consequences for any professional journal





Joseph Garland

that, like *The New England Journal of Medicine*, must depend on its reputation for independence, integrity and objectivity.

In July of 1991 Dr. Jerome P. Kassirer succeeded to the editorship of the *Journal*. The society is fortunate to have found so talented and dedicated a person to lead the *Journal* into the 21st century. He is assisted in this task by Dr. Marcia Angell, who served with me as executive editor and agreed to continue on in this role with Dr. Kassirer. As I see it, the new editorial team faces at least four major challenges.

First of all is the ongoing issue of the relationship of the *Journal* to its owners. As it must if its success is to continue, will the *Journal* continue to remain editorially independent? And, now that the *Journal* has become the most important source of support for the Massachusetts Medical Society, what is going to be the corporate, administrative and financial relationship between the *Journal* and the society?

Secondly, there is the challenge to keep the *New England Journal* poised successfully as a general medical journal at a time when virtually all new medical journals are highly specialized and when there are many other competing sources of information for physicians. Can a journal like ours continue to be successful in providing general material that will be understandable and relevant to physicians in a wide range of specialties?



Franz J. Ingelfinger

As it must if its success is to continue, will the Journal continue to remain editorially independent?

The third challenge is the relation between the *Journal* and the public and the media. The *Journal* and other publications like it are often accused of attempting to control the flow of information to the public. Can some sort of durable compromise be reached, in which it is understood that the review function of the *Journal* helps to ensure the reliability of information and thereby helps the medical profession and the public?

And finally, there is the challenge of new methods of communicating and storing information using computers. Recently, the American Association of Advancement of Science announced the establishment of the new computerized journal called "The On-line Journal of Current Clinical Trials." The idea is that reports on clinical trials will be submitted and reviewed in the usual way, and as soon as they pass review, will appear on-line, available to subscribers who will have immediate



Arnold Relman


access to the information through their computer. Many people are predicting that printed journals will become obsolete as more and more information is stored and transmitted electronically.

Will there still be a need for printed journals, particularly general medical journals? I am convinced there will. Good, well-edited, general medical journals, printed on paper, will continue to be essential for the medical profession. I do not believe that computerized databases, or even computerized journals, can replace all the important functions of the printed journal, but of course, that remains to be seen. That is a problem the new editors will have to face. Knowing them, I feel confident that whatever happens the *New England Journal* will enter the 21st century, still the exemplar and the most respected medical journal in the world. ❖

Arnold S. Relman, MD is editor-in-chief emeritus of The New England Journal of Medicine, professor of medicine and of social medicine at the Harvard Medical School, and senior physician at the Brigham and Women's Hospital. He presented this talk as the 16th Joseph Garland Memorial Lecture of the Boston Medical Library on October 16, 1991.

NEJM photos courtesy of Rare Books, Countway Library.





A Bow to Tradition:

Magrath's Last Stand

by James L. Neller

THE BUILDING INDICATED ON MY small guide map contained the usual complex maze of levels and doors required by all institutes of higher learning. I hurried through its polished halls, frantically searching for the auditorium where the introductory session was to be held. It was already well past the time for its commencement. Imagine being late for my first class at Harvard Medical School! The thought evoked feelings of guilt and remorse, as though I had already proven myself unworthy before I had even begun.

True, it wasn't altogether my fault, although this gave me little solace. My total lack of familiarity with the surroundings and the almost overwhelming ambience of the place had overcome my usually reliable faculties to the point that I had misread the sparse directions furnished me and had wound up far afield. By the time I had discovered my error, I knew I couldn't help being late. What a way to start a career!

At last I came upon the designated entrance, but was further unsettled to note that the massive doors before me were tightly closed as though forbidding entry to crass late-comers like myself. I hesitated to open them for

*He followed docilely
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fear that I'd find myself confronted by a sea of faces filled with silent scorn over my unconscionable cunctation. With an effort of will I managed to overcome this delusion and make my entrance.

The large tiered area that appeared before me was nearly filled with students milling about or lounging and talking in subdued tones. Some, apparently transfer students like myself and unfamiliar with their surroundings, appeared as nervous as I; while others, possibly those who had spent their pre-clinical years at Harvard, seemed to be taking it all in stride. Oddly, there was also a relatively large group of older

individuals filling the upper tiers, for whose presence I had no ready explanation. For a moment I thought I recognized the face of Hans Zinsser, the renowned bacteriologist, but I couldn't imagine what he would be doing there. Perhaps the faculty was required to attend these introductory functions; I had no way of knowing.

At any rate I was doubly relieved that no one appeared to take any notice of me at all, and my being late was clearly no longer a factor. Mollified by these facts, I sought a place where I could establish my presence as one of the crowd and thus not further identify myself as the outsider I felt myself to be.

Once settled, I checked my watch and was startled to note that it was already almost an hour beyond the scheduled start of the lecture, or whatever it was intended to be. As far as I could tell there was no sign of a speaker or any evidence of preparation for one. It struck me as odd that the assembled students showed no sign of anxiety or irritation over this state of affairs, and no one revealed any attempt to give it all up and leave. I was puzzled, but reluctant to ask what was transpiring for fear of revealing my Midwestern naivete.

After many more minutes had passed without any significant new occurrence, my natural curiosity almost overcame my fears. I was about to open conversation with a nearby individual and solve the riddle, when the door leading to the speaker's platform slowly opened, revealing a small elderly lady dressed in a light blue gown with frills at neck and cuffs, and wearing white gloves and a tiny bird's-nest hat. Carefully she secured the door so that it would not automatically close. When this had been successfully accomplished, she reached back, took the hand of another individual standing behind her in the wings, and led him slowly on stage.

As he came into the light, I saw that he was a mountain of a

man, well over six feet in height, clothed in an impeccably tailored, almost formal, black vested suit. His cuffs and collar were starched and white, and he wore a black string tie, the ends of which hung down and almost reached the heavy gold chain that traversed his vest. He had a magnificent head of silver white hair, carefully combed back at the sides, and his skin was translucent in texture with the ruddy pinkness of a child's. Under shaggy white brows, his pale blue eyes were completely without expression.

He followed docilely where he was led and showed no awareness of either his surroundings or his audience. When this strangely fascinating pair

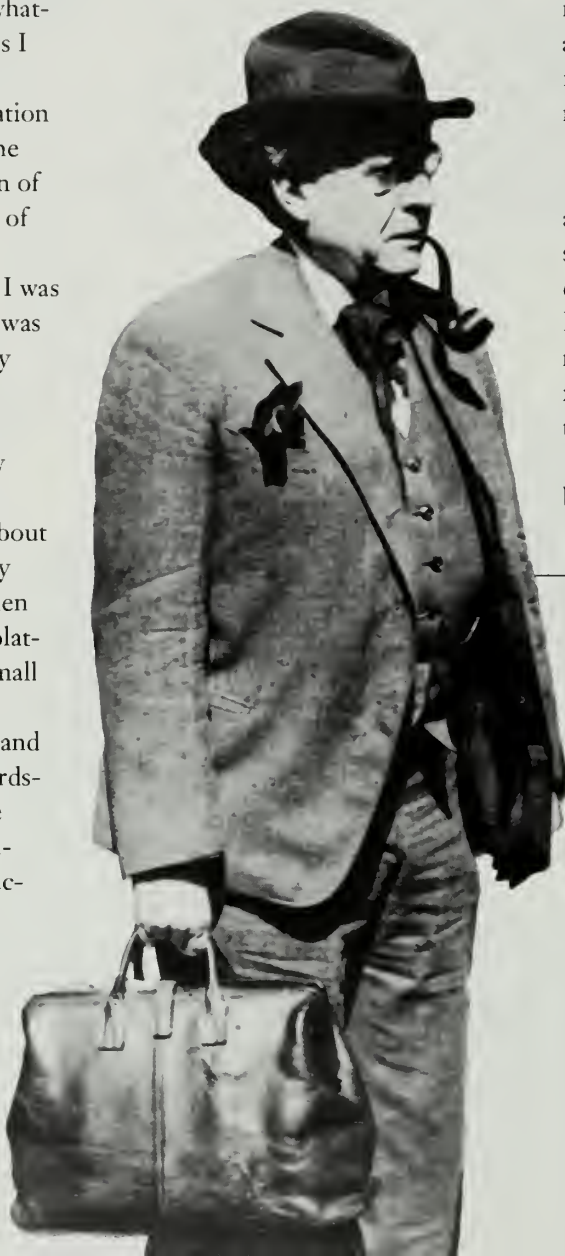
had reached the lectern, the tiny lady placed the man's large hands firmly upon it, smiled at him reassuringly, then turned and found her way to a seat in the front row directly facing him. The assembled students, frozen until this moment into a startled immobility by the tableau before them, now hurriedly took their seats. A tense silence fell over the auditorium.

For an extended period, the giant and imposing figure of the celebrated and widely respected George B. Magrath, professor emeritus of legal medicine at Harvard (for that was whom I later discovered him to be), stood motionless and silent before us. When at last he did speak, his words were fragmentary, and punctuated by long meaningless pauses. It was abundantly and shockingly clear that the man was hopelessly senile and scarcely able to function. The audience leaned forward in their seats and strained to make out what he was saying.

"May — I — have — slide?"

The auditorium suddenly darkened and a projected slide appeared on the screen above his head. It revealed a dead body sprawled on a rumpled bed. For a time the giant at the podium did not move. Then he slowly turned his massive head, glanced momentarily at the screen.

"This — was — strange case — body — unusual — next slide, please."



George Burgess Magrath was a Boston legend in his own time—like Sherlock Holmes, a pipe always in hand. In his 29 years as the Suffolk County medical examiner, he personally investigated over 21,000 deaths and testified in 2,000 court cases, cloaking the office in a new respectability.

"No murder trial was complete without Boston's Dr. Magrath," the headline on page one of the *Boston Globe* proclaimed when Magrath died in 1938 at age 68. It was written that he lent drama and color to murder trials. When he talked

*Finally it came to me
that I had witnessed
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the true meaning
of tradition.*

Another slide appeared, this one showing a tug boat with red stains on its foredeck. The speaker made no comment. On a signal from the little lady, another slide followed, showing a long knife and a piece of chain. The giant seemed to momentarily awaken.

"Murder implement." He hesitated, put his hand to his forehead as if trying to remember, "Tug boat — Next please."

This strangely fascinating but deeply heart-rending scene continued like an out-of-sync movie for an agonizingly long time. No one among the assembled students uttered a sound or took his eyes from the speaker.

The painful hesitations between words became progressively longer. At last it became evident that the stricken man could no longer continue. At this point the woman in the front row raised her hand, and the lights immediately came on. Responding to the glare,

Professor Magrath looked up and seemed suddenly to recognize the presence of his audience as though for the first time. Somehow he found the strength to pull his ravaged mind together. Tears welled in his eyes. With obvious effort, but great dignity, he managed to articulate his thought.

"This is — my last lecture at Harv — I bid you all welcome and — goodbye."

The effort drained him. His expression became blank and he was again lost in the limbo of his senility. The woman stepped quickly to his side, took him by the hand and led him away.

The spellbound audience sat in stunned silence. It seemed an eternity before the older group quietly rose to leave, and were then followed by the others in slow motion until the auditorium was empty.

I stayed behind well after they were all gone, trying to understand why I was so emotionally overwhelmed. Finally it came to me that I had witnessed a classic example of the true meaning of tradition. That a huge university could allow this event to occur without need for explanation, knowing that its students were mature enough to accept it for what it was—a glowing last moment in the sun for a loved and respected colleague—demonstrated a deep and unshakeable belief in the value of tradition as a basic necessity

for the fullness of living.

In a sudden flash of insight, I realized that acceptance of this concept was fundamental to my understanding of what was being offered to me at this great institution of learning. On realizing this, I felt purged of all my former petty feelings of inferiority and self-doubt as well as the uncomfortable sense of being out of place and unwanted. I knew then that I was exactly where I belonged and wanted to be. What I could become here was only limited by my own capabilities.

In the over half-century that has elapsed since the above event occurred, I have never forgotten the effect it had on me. It was the key that enabled me to unlock the full richness of my ensuing Harvard Medical School experience. I hope its telling will be as inspirational to others as it was to the embryonic physician who experienced it many years ago. ❧

James L. Neller '39 was a practicing surgeon in Los Angeles for nearly 40 years, serving as chief of staff or chief of surgery at various times for three of the area's hospitals. He enjoys sculpting, oil painting, poetry writing, and in addition to collecting rare historical recordings and historical data on great pianists, has himself composed music. He is currently hosting a radio series on historical women pianists for public broadcasting.

in his quiet professorial voice, judges, juries and lawyers all leaned forward intently. It was a voice that he played like an instrument for maximum effect, a result of his musical training, it was said.

He was "like a lion resting" as he waited to testify, a *Globe* reporter wrote. Magrath was athletic with a flowing mane of hair: red in his youth, later gray, then white. He typically wore a black Windsor tie and often a Western Stetson hat.

Known as Jake by his friends, Magrath graduated from Harvard College magna

cum laude in 1894 and Harvard Medical School cum laude in 1898. He was a popular teacher at the medical school, first in pathology and later in legal medicine, after he made the switch to that then nascent specialty. He was appointed medical examiner in 1907, bringing expertise later described in a faculty memorial by Henry Christian, Myrtelle Canavan and S. Burt Wolbach: "In this office Dr. Magrath rapidly became recognized as a leading expert in New England in the solution of the problems

of crime by violence. His fine basic training in pathology, his skill and exactness in post-mortem examinations, his logical processes of thought and exposition, his intellectual independence, his unquestioned honesty and courage, made of him an expert in court and out, whose opinions carried the greatest weight. To be cross examined was a challenge to his knowledge and intellectual acumen which he enjoyed; rarely could he be caught unawares by opposing legal talent."

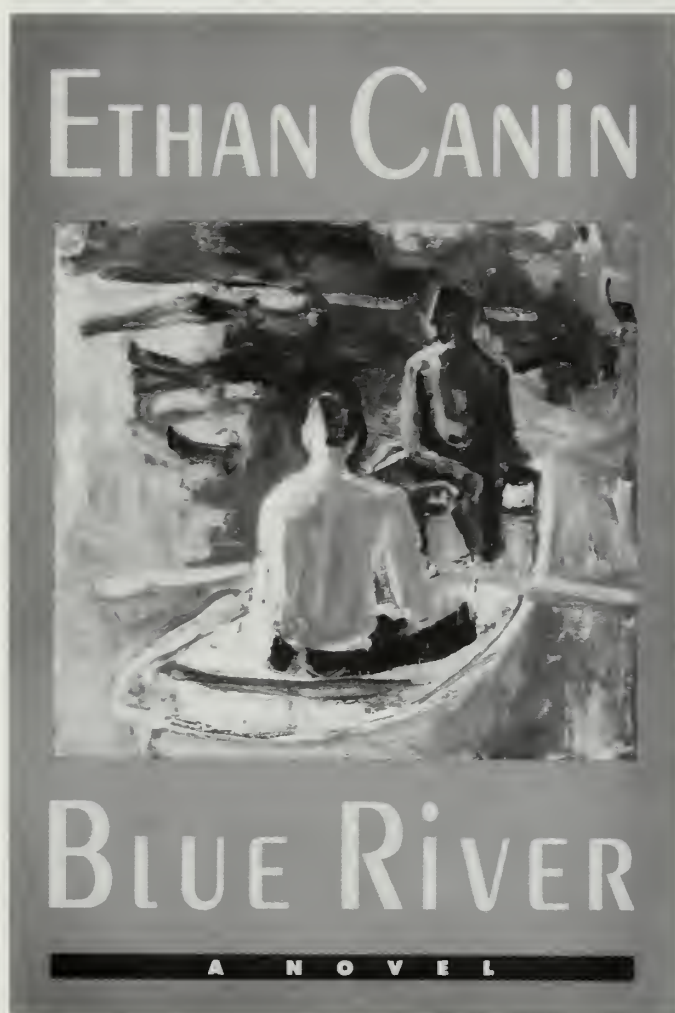
He had a zest for life. He was an avid rower and known to be the first and the last of the season to row on the Charles. He would dash to the scene of a crime in his 1917 Model T. Ford, "Suffolk Sue," on the front of which he had affixed a fire engine bell. He was married only to his job, and lived in a room above his office, on call 24 hours a day—though he had a wide circle of friends. Non-traditional, but very much part of Harvard tradition.

Ellen Barlow

Blue River

Excerpts from a novel

by Ethan Canin



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AS A BOY MY BROTHER LAWRENCE WAS ALWAYS HIDING. HE hid behind doors, under porches, in the deep shade of trees; he lay down in drainage ditches and fields of tall grass and fell asleep; he submerged himself in the Mississippi River and breathed through a short length of reed while the other boys and girls played tag on the shore. In the afternoons I was sent to find him for dinner. I was five years old the first time I went to look for him; that day he was sleeping in our back yard behind a cut stump. Later I would find him crawling in the heating duct in our basement, squatting on the limb of our maple with his head in the leaves, standing in our yard in a hole he had dug deeper than his head. I was always coming across him by surprise. In our house he walked noiselessly. He sat in the corners of rooms. He was six years older than I was, and I regarded him with reverence. One April afternoon when it had been drizzling for days he walked to the shore of the Mississippi, lay down on the beach, and covered himself up to his neck in the sand. I found him there when I was sent to fetch him for dinner, smiling slightly, just his head showing, his face turned up to the spring rain.

Then, when he was in high school, he stopped hiding. His voice grew louder, his step became pronounced, and he began roaming about the world in the open. He fought; he stole; he came home drunk, knocking over the maple coat rack in our front hall. All the time I expected him to be standing in the corners of rooms or squatting in trees or lying in the tall grass at the back of fields. I didn't think anyone ever changed like that. But now he had a closet full of stolen clothes and a real set of brass knuckles between the box spring and mattress of his bed; he came home in police cruisers. More than once I found his shirt soaking in our bathroom, settled blood darkening the bottom of the sink.

A white scar crossed the knuckles of his right hand; one eyelid drooped. He slid open the window of the bedroom we shared so his girlfriends could climb inside, their bracelets jingling in the night.

And then, the year he graduated from high school, he changed again. It happened in one day, his eighteenth birthday. After that he stopped fighting and stopped staying out until morning with his friends. He cut his hair; he moved out of our room into an apartment in the basement of our house, where he spent every night reading. He went to night school and learned engineering. He volunteered at the fire department and at the youth group of which I was a member, leading us on picnics in the state parks and flower-planting expeditions at the home for old people. At our meetings he spoke to us about discipline. From my seat in the basement of St. Vitus Church I looked up at him standing at the podium, his voice keen and his eyes filled with a fierceness that made his heart seem true and unbendable at last.



ON A SUNDAY MORNING IN THE JUNE OF MY THIRTY-FIRST year, I open the front door of our house looking for the newspaper and find a man standing out there: stoop-shouldered, bent, blotch-skinned, his hair and beard tangled, staring with the big, wet eyes of an animal. Some kind of bum, I think, stepping back, half-shutting the door, until I recognize him.

He stands on our porch, not moving. Not moving, I stand inside. In his gloved hand he holds the paper I have come out to find, bright from the morning sun. I have to squint, and he, though he faces the dark inside our house, squints back. Because I cannot think of what else to do I reach to take the newspaper, which he hands to me. This is something, at least—but still, he does not step inside. We have seen each other only once in fifteen years. But this is no product of coincidence—God forgive us—and what I think in that moment is that we both know this. I motion him in. He complies, his shoulders still stooped, his walk a little flop-limbed, as if the arms don't know what the legs are doing. He ducks through the doorway, although he is not tall enough to have to, and stops in our hall at the edge of the rug. The rug is of decent quality, a hand-tied Oriental, and his boots are caked with dry mud. We look at each other. Jonathan, I think to myself, is upstairs in his room.

So we stand here, he in his half-animal's pose, I in the beige, long-sleeve pajamas I wear now. They put me at a disadvantage, but by crossing my arms I try to hide their flannel monogram. At this, he bends his head forward, a polite gesture. His dark eyes blink in the weak light of the ceiling fixture; his crooked nose swells and contracts with his breaths. I see immediately that his clothing is too small, as though he has grown since buying it, like a child again

somehow, outstripping his cotton pants. His ankles show above his socks.

We stand here, he looking at me and I at him. He moves his mouth occasionally as if there is a gumball in it, although there is not: I know well enough what this means. We don't speak. His knees, bony as I remember them, protrude, and even through the pants I can see the big flat patellae quivering. His breaths whistle.

My wife, Elizabeth, comes to the kitchen doorway then, wearing her own flannel pajamas, hugging her arms against the morning chill. Elizabeth is a generous woman, more generous than I, and although I do not always understand this generosity I am always grateful for it. She has never seen him except in pictures, but as we stand across from each other in our little hallway, I on the carpet and he at its rim, she comes in, strides across the room, and they embrace. She reaches up to kiss his cheek and he bends down.

"Well, Jesus," I say, "Lawrence."

"Edward," he says.

I step forward and reach my arms around him, and he reaches his own around me. They are stiffer than I remember, those arms, and firm in an unmuscled way, as if they have been cooked. We embrace. His shirt smells pungent—chlorine, I think for a moment: Has he washed it in a swimming pool?

"We've got to clean you up," says Elizabeth. She has been cooking in the kitchen, and now she wipes her hand on her pajama top, touches Lawrence's flannel shirt and glances at her finger, as though to find dust there. I married her for this frankness.

"Have breakfast with us," I say, taking his elbow to lead him to the kitchen.

"I'm hungry," he answers.

In the kitchen the skylight sun illuminates us. His skin has the pale cast of an anemic's, and on his face just below the cheekbone I notice a scratch. But I don't want to examine him like this: I motion him to the table. Our kitchen is a suburban one, made mostly of wood-colored Formica, with recessed lighting on the ceiling and a line of pictures on the free wall—small, wood-framed drawings of plants and insects. Elizabeth has hung them there and we have learned the names of all the local life. On the countertop sits a wicker basket full of green and red vegetables. Elizabeth sets down my mushroom-and-cheese omelette in front of Lawrence. She had been working on it just before he came, while I swept the pool deck and back patio. She excuses herself and goes upstairs, and Lawrence leans forward and takes a bite the size of a hamburger. The last time I saw him, five years ago in a veterans' hospital in Texas, I thought I might never see him again.

"So," I say.

Over the plate, his head is still when he chews, the thin jaw working independently. He has a beard, a mustache and

thick eyebrows. He has hair in his ears.

"How've you been, Lawrence?"

"I'm fine now," he says. "I've had my troubles." He takes another bite of the omelette and pours himself more orange juice. "I'm working," he says.

"Working where?"

The scratch reddens. He looks at me, blinking. "Jeez," he says, snorting, showing me his big teeth, which to my surprise are still white enough. "I don't remember where."

I get up from the table. There are dishes in the sink, and I step around behind him and begin washing them.

"You're a doctor," he says.

"An ophthalmologist."

"That's good." He pours another glass of orange juice. "I saw your pool."

"I work hard."

"I work hard, too."



LIFE, I KNOW, HAD GIVEN TO ME WHAT IT HAS NOT GIVEN to many others: a sense of importance in my work, and rightness, and security in the wood-and-tile house I own and insure; the wall-to-wall, thick-pile, stain-resistant carpet there transmits to me, I sometimes think, the same warmth and ease of breath that a caveman must have felt in the skin of a bison or a musk ox. I suspect that for a woman this feeling is not the same; for I do believe that, despite what is often said, women are in some way less afraid than men and therefore less in need of this kind of comfort. Elizabeth likes the wooden floors of the downstairs, for example, and does not understand why I like to take off my shoes and stand barefoot on the carpet. Late at night, when she and Jonathan are asleep, I stand shoeless at the head of the stairs and look through the small window on the landing, out into the mostly dark neighborhood and beyond it to the lighted Mormon church in the hills. It stands there among the swaying cypresses like a glowing, alabaster rocket. Around me our house creaks as though alive. These are the creaks of studs and headers and sill plates, the shimmying of nails in the California air that is dry all night until dawn brings in fog from the sea. I know this, but it still seems like a gesture to me, a nod from our house when the rest of the family sleeps and only I am there to hear it. I pat the wall.

What I also do sometimes is this: I leave the landing, put my shoes back on, and go out to the garage, where Abraham wakes devotedly and hops into the Land Cruiser with me, and together we drive down the hills out to the freeway. This is in the dead of night and except for the rarest car heading down the hill beside us, we are dead alone. These drivers, I like to imagine, are fishermen or bakers, although I know they are more likely stock traders awake for the market's opening in the East. One or two will wave at us, although we cannot see each other's faces. What used to puzzle me was the noise of our garage door opening, that

the bump and chain-coil of its slide did not wake Elizabeth. Our bedroom is right above the garage, and though my wife is a heavy sleeper I am convinced that she is aware of what I do yet chooses not to say so. Where could she imagine I am going? Does she think I have a lover? Of course I do not.

But perhaps what I do is worse. At the freeway Abraham and I head south, because this is away from the city and deeper into the part of the country where the lots have not yet been divided; now and then along the road one still sees a stable. The freeway is eight lanes wide. Three or four cars are usually in view, and in the mirror I will sometimes see another. To the west, fog rests on the hilltops but does not yet spill down into the valley; to the east, the reservoir is blacker than the night. This highway, a sign says, has been judged by someone to be the most beautiful in the country, and driving it I can certainly see why—especially by day when the hills are gold and the live oaks stand alone in them like statues. But here at night, what I see is the shining wetness of the asphalt and the gently curving line of reflectors, set regularly into the divider stripes as they bank and fall away into the curves. This to me is also beautiful, though I would not say so to anyone. The loveliness of this road is a secret of the engineers and me, how the curves tilt gently and the damp asphalt is such new black that at certain angles it turns white in my headlights. I know these curves perfectly, and they are everywhere: nowhere here is there a flat-out stretch. The headlights shine back at me with this mysterious color change of jewels, and sometimes, although certainly not always, and though I cannot say what makes me choose the times I do, I close my eyes.

I keep them closed. I know these curves so well that I can guide the car perfectly, banking so that at times it seems we are in an airplane. I am so delicately balanced and aware of the tilted roadbed that my arms compensate for the tap of the dog's paws on the seat next to me. For half a minute at a stretch I dare myself not to look, following the gentle curves I know by memory, counting down from thirty, told of my slight errors only rarely, by the chatter of reflector bumps on tires: still with my eyes closed, I drift the car the other way. I do this once or twice a month. The road is nearly empty and the chance is small I will ever come across another car; but still, the risk is senseless, and one that flies against the basis of my life and work. I wonder why I do it. In medicine there are gambles too, but every one is well considered and embarked upon with the aim of an exact miracle. Here instead there is no purpose. With my eyes closed I sometimes imagine the hidden obstacle—a man, a car, a fallen tree—and yet I drive on, down the curves, the car held true more by these engineers' calculations than by my arms, yet held there nonetheless while we fall together blindly, Abraham and I, along a calculated curve and bank, away into the night.



IN MY POCKET I HAVE A LETTER HE [LAWRENCE] SENT ME long ago, right after he had vanished from our lives, and at this moment I consider asking him about it. I found it this afternoon in my file in the basement. But as we stand here in the cooling air I realize that whatever we could say about it now would have only a distant, altered bearing on the truth; and more than that, I do not want to give my brother hope. I finger the envelope in the pocket of my windbreaker, but do not take it out.

Instead, I realize that what I want him to do is ask me a question. Years ago, in another part of the country, in a place where there was summer and winter and fall, where there was a humid green spring and families we all knew, he would have taken this moment to teach me something about the world. He would have asked me about the planets, or about electric current, or about the climatic forces that have produced the cottony cirrus clouds now moving above us, bright with suburban light. I look up at them. He was always my teacher in the world, if nothing more, and I was—and still am, in truth—his student.

But he doesn't ask me anything now. He stands with his hands opened toward the sky, not speaking. It is still warm, sixty degrees, though it is past ten o'clock. In California it is harder to keep track of years. What has happened in those since we have seen each other? Upstairs my son is sleeping, and a few rooms away my wife—my wife!—is readying a few last things for the night. A swimming pool laps at our feet. All around, head-high cypresses hide us.

"Lawrence," I finally say, "what is the atomic number of chlorine?"

"What?"

"The atomic number of chlorine?"

"Of chlorine," he says. He studies his palms. I think of him, standing in a gray uniform at the exit door of a casino, shiny black stripe down his pants leg, jingle of keys on a chain at his belt, scanning the tables, lights flashing all around him—Bingo! Play! Slots!—his billed cap slanted back and one hand in his pocket. He looks up. "Seventeen," he says.

"Right," I say. "Bingo."

¶

"CAN I STAY FOR A FEW DAYS?" HE ASKS.

I look at him. I scratch my palm. In the house the light has come on in our bedroom. "No," I say. "You can't."

He pats the wet net of his beard. "I thought you might say that." He glances away. "Your wife said it was fine with her."

"I'm sorry."

"Are you?"

"Yes."

I look down. I wonder what his place in Reno is like. Probably no more than a room somewhere, at the top of a residence hall, the ceiling blinking with the neon outside, the window looking over a parking lot and perhaps, in the distance, a small mountain vista. He would have a bed and a bureau, two or three bookshelves stacked with science texts and several years of magazine subscriptions. Down the hall the showgirls would live.

In my wallet are ten twenty-dollar bills from the automatic teller, and I reach back and take them out. They are crisp, and the cloth-like stiffness of the paper makes it seem as though I am giving my brother something of value.

"There's a bus at midnight," I say. "I'll take you there."

He looks at the money. "Hey," he says, "not bad."

"Do you need more?"

"Do I need more? Everybody always needs more."

"I'll drive you to the bus."

¶

*He was always my
teacher in the world,
if nothing more,
and I was—and still
am, in truth—his
student.*

YOU [LAWRENCE] LIVED SO MUCH BY your reason, I now understand, that you could never have acknowledged your faith; and I, until much later, until long after you had left us, was the same. Even now I cannot wholly find it—perhaps because, in those days, I always took your side. I know that in return you took it on yourself to teach me about the world, and I am grateful for this, Lawrence. One morning at breakfast with Darienne and me you swallowed a forkful of pancakes, then abruptly gripped your throat with both hands. "I'm choking," you whispered,

fumbling with the buttons of your collar and blinking your eyes while Darienne ran to you and shook your shoulder. By then you had begun to slump in your chair. "Do something, Ed," you whispered. I lifted you but you slumped further, and I tried to get my thin arms around your chest to squeeze the way I half-remembered from first aid films. Your eyes closed and you slid sideways to the edge of the chair, then from there onto the floor, where you whispered, "And so I die from a bite of pancake," before you stood suddenly, opened your eyes, and explained to me that anybody who could speak was not truly choking. "If the trachea is blocked," you said, "a person can't make any noise. If someone tells you he's choking, you can relax." The things you taught me were all like that, Lawrence: practical bits about the world that distilled it to its scientific elements. They would give me an advantage, you said, when I needed one.

Mrs. Silver, on the other hand, always taught a different kind of lesson, waiting for those moments when you were

not there and then acting, perhaps, in place of our mother. She had taken it on herself to teach me morality. In our back yard, on the porch, on the dew-dampened streets when I walked with her to the store with her two-wheeled grocery cart, she told me stories that were supposed to be funny and moralistic at the same time. She laughed in different ways, depending on the moral. Sometimes it was only a smile and a quick, nearly silent exhalation, her eyes closed halfway; but occasionally she transformed before me, bending forward at the waist, her hand pressed there, fingers spread outward, while all the mysterious years of her life—the stories we knew and her hidden, changeable age—slid off her as though she had stepped from a pool of water. Her breasts, their compact, triangular ridge, bounced. Tears came. This laugh would continue, diminishing, for a whole minute, going and coming as she stepped lightly around me. It was part of what confused me about her, as if in its robust cheer I suddenly glimpsed Mrs. Silver years ago: at twenty-five on a sun-whitened porch, sipping whiskey sours; at seventeen, dancing the conga in black pumps; at fifteen, wearing dandelion bracelets and smoking thin cigarettes.

On summer mornings when I came out to the porch she would put aside the newspaper and walk with me through the screen door out to the yard, where for the first few moments I could smell the sharpness of the vodka, weak but permeating, from her pores. Then the scent disappeared and there was only the hot smell of summer out there, the mix of dust raised by the gentle river wind and a heat that seemed to come not from the sun but from the brown-edged leaves of the ground weeds themselves. She was short, with small, wet eyes, friendly features, and pale, nearly white skin. We walked in the yards along the river bluff.

"Edward," she said to me one morning during your wild days, "I have a story you need to hear. It's about some men who are under the control of Lucifer." We crossed the narrow strip of bare earth where you had cleared the grass for a drainage gully. I nodded. She picked a dandelion from the hard ground and began pulling the small petals from the head. "There are two groups of starving men—one good and one evil—in his lair, and Lucifer is giving a banquet at which the most delicious soup is served." She paused over the word Lucifer. By now, we were walking near the bluff. She stopped and, with her hands in the pockets of her skirt, looked over the divide. She made a habit of hesitating this way, of pausing to let some idea sink in, her small eyes always willing to meet mine, as if somehow I would instinctively know the point of her fable. But I didn't. What were good men doing in Lucifer's den? Below us the water slid toward Louisiana.

"At the banquet," she went on, "the most delicious soup is served. But the Devil has handed out spoons that are longer than the men's arms." She paused again. Into the spiraling wind she dropped a handful of the dandelion petals,

which spread skyward in front of us as she waited for me to speak.

"So?"

"So, the men can't eat the soup." She looked at me, her pale cheeks pink with anticipation. "They can't get the ends of the spoons into their mouths." She reached with her arm and pretended to maneuver an overlong spoon toward her lips. "One group of men is shouting; they're tearing out their hair because the Devil's trick has kept them from eating the wonderful soup." She paused. "But the other group—" She smiled, and her voice fell to a whisper. "The good men are silent, eating their fill." We walked upriver along the edge of the yard. She smiled again. "How can that be?"

Down from us, shore birds circled over a dark school of bait fish. I looked at her. "They're holding their spoons by the middle of the handle," I said.

"Oh, Edward," she said. "No."

"No, what?"

"That's not the point. They aren't allowed to hold the spoons there. They have to hold them by the ends."

We walked on. "They're not very hungry, then."

"No. They're starving. I already said that."

From inside the house I heard Darienne blow the first notes of her dismal, deliberate scales. I followed Mrs. Silver farther upriver. "Then I give up," I said.

She looked into my eyes. At the apex of each green iris, perfectly symmetric, was a small fleck of black. I glanced away.

"Oh, Edward," she said. "Don't you see?"

"See what?"

She bowed her head toward me. "That the good men are feeding each other," she said.

We walked on. She kept glancing over at me, and finally, when the woods came into view upriver, she stopped. "Do you see the point of my story?" she asked.

"Sure I do."

"What is it?"

I picked up a stone and rocketed it at a bird circling over the river. "It means, be kind to your neighbor."

"Right," she said. "That's most of it." She smoothed her skirt. "But it applies closer to your own life, too, you know."

"I know."

"I'm not sure you do know," she said. She smoothed her skirt again. "The point is that one day you may have to take care of your brother." ❧

Ethan Canin, who took three years away from HMS to write this novel, expects to graduate in 1992. His first book, Emperor of the Air, was a collection of short stories for which he won a Houghton Mifflin Literary Fellowship. Canin's current plan is to pursue training in neurology, psychiatry or emergency medicine, and to write part time.

Dirty Laundry

by Jim Cashel



IT'S MONDAY MORNING AND I'M LYING in bed thinking about my housemate Lishan's bed sheets. Lishan sleeps in the bedroom next to mine—in theory, anyway; he's an intern in surgery at the hospital across the street and is seldom home. For the last month he hasn't used sheets. His only set of linens is in the dirty clothes bag propped against the radiator in his room, and he is too busy to do laundry. So for now he sleeps on his bare mattress.

As I lie under my covers, I'm trying to figure out when he'll get to a laundromat. I heard him leave for the hospital this morning at 4:30 and I know he's working all day, all night, and all day tomorrow until 8:00 PM. When he works nights, he usually gets no more

than an hour or two of sleep, so after his 40-hour shift, he won't feel like going to the laundromat when he gets home. Wednesday he goes in at 4:30 AM for another 40 hours, so that shoots Wednesday and Thursday; Friday he works only from 4:30 AM to 8:00 PM, but the laundromat isn't open late on Fridays. And on Saturday he goes in at 5:00 AM to work from Saturday morning to Monday night. After that 63-hour shift, it's not likely he'll care about his sheets.

I know he has a day off two weeks from this Sunday. Maybe then he'll get to them. Then again, he may have higher priorities for his day off, such as to see his girlfriend or to sleep, so even then his laundry bag may not move. He

has a week vacation in four months, but he's leaving town, so unless he buys sheets during his travels, I'm not sure that will change the situation either.

Surgery is Lishan's possessive mistress. She is jealous of Lishan's other interests and commitments, and tries to monopolize all of his time. It's clear Lishan has been thoroughly seduced—he speaks in passionate tones about the stimulation and satisfaction of surgery—but to love this seductress he's been obliged to give up things in his life we all take for granted, such as going to a movie, having dinner at a friend's, or even sleeping on sheets. Lishan's good humor carries him through, and I'm sure he even chuckles about his cold vinyl mattress.

GLORIA IS A MEDICAL INTERN IN Albuquerque who has the ability to find humor in just about anything. On the phone last week, she was having a good laugh about a new program in her hospital to reduce stress in internship. In Gloria's hospital, interns work on average over 100 hours each week and have one day off every other week or so (though when we spoke, Gloria had had only one day off in five weeks). The hospital administration, concerned about the stressful effects of this schedule, and responding to the suicide of one of the interns the previous year, decided to organize a lecture series on stress management. They signed up renowned speakers who had many useful and appropriate things to say. Unfortunately, it was difficult to schedule the lectures given the interns' busy schedules. So the administration chose one day it knew would be free—Labor Day—and had a day-long series of mandatory lectures.

Gloria had big plans for Labor Day—selfish, wonderful plans of sleeping, going for a hike, and thinking about issues she hasn't had time to reflect on for many weeks, including a recent death in her family. Instead—and she really was quite amused—she'd

*She begins telling
him about her day,
but falls asleep mid-
sentence.*

be going in to work to learn all about the stress that interns in hospitals face.

MY FRIEND MEG RECENTLY FINISHED her internship at a hospital in New York. Not long ago she was chuckling about internship reform in New York State. Several years back, the state passed legislation limiting the total hours interns can work to 80 per week. This followed a vigorous public outcry about internship workload after the much publicized Libby Zion case (in which a young woman died in a New York hospital, reportedly in part due to intern fatigue).

Meg mentioned that the Department of Medicine at her hospital took the new legislation very seriously, and despite economic and scheduling constraints, tried to comply. For example, the administration changed overnight call from every third night to every fourth (although the workload increased proportionately—they were “stealing from Peter to pay Paul,” admitted the program director). The administration didn't, however, include in the 80-hour limit such activities as pre-rounding (several hours every morning). Nonetheless, Meg says her workload was usually, but not always, under 100 hours per week.

What Meg was really having a laugh about were the clever surgeons with whom she worked who were plotting a wide variety of tricky methods to sidestep the legislation: ideas ranged from not counting time in the operating room as official hours to ignoring the rules and simply paying the fines (far cheaper than hiring more staff).

She found humor in the stubborn resolve and imagination of the surgeons in avoiding internship reform.

I HAD LUNCH WITH MY FRIEND MATT last Wednesday. Matt's wife, Sandra, is an intern in pediatrics. He was kidding about the fact that when she comes home she is often so tired that she begins telling him about her day, but falls asleep mid-sentence. The funniest part is that she doesn't stop talking when she falls asleep, but instead continues by choosing random words from her dream. Matt had never seen her do that before her internship and, in a way, he found it cute.

A few weeks ago I saw Sandra while at their apartment for dinner. Before she fell asleep during dessert, she was telling me how much she was enjoying her internship, but how funny it was that afternoon when twice in clinic, while listening with her stethoscope and closing her eyes to concentrate, she fell sound asleep. We all had a good laugh.

MY HOUSEMATE LISHAN HAS CLEAN sheets. I saw him today for the first time in two weeks when he came walking in after dinner with a wide smile on his face and a big bag of clean laundry over his shoulder. He had discovered a laundry pick-up and delivery service. For only \$25 a bag, they would do everything. “I was psyched—I would have gladly paid double,” he joked.

So now he has starched linens. Before he collapsed onto them, I could see how happy he was and how funny he found it that he had been in neglect for so long.

Such are the joys and the humor of medical internship. ❧

Jim Cashel '91 works at the John F. Kennedy School of Government on programs of international technical assistance.

Sharing residencies

by Elizabeth A. Rider

ON JUNE 19, 1991 I BEGAN MY pediatric internship at Children's Hospital in Boston along with 27 other somewhat nervous but enthusiastic interns. After five days of orientation lectures, demonstrations and even a canoe trip, my fellow interns began their actual work on the wards. I went home and did not start my internship until a month later. This arrangement was according to plan, for a friend and I are sharing our residency. We are involved in an innovative arrangement at Children's Hospital in which we alternate months on clinical rotations, leaving time available for our families and other commitments.

Residency training has changed since the days when young residents—usually men—lived in the hospital and worked every other night for little or no pay. Then were no intensive care units, DRGs, beepers, Medicaid or AIDS. Many of the ethical dilemmas facing physicians today simply did not exist. The increase in scientific and technical sophistication, the rapidly expanding information base, the third-party payment crisis and other factors have complicated the kinds of decisions physicians must make.

Patients in hospitals today are sicker and they are discharged from the hospital more quickly—a phenomenon referred to as the “sicker quicker syndrome.” Frederick Lovejoy, MD found that from 1978 to 1988 at Children's Hospital in Boston, the average length of stay decreased from 15 to 8 days, while the number of patients treated each year doubled. Fifteen years ago 5 percent of hospital beds at Children's were intensive care beds, compared to 20 percent today. Residents are seeing

*Residents are now
more frequently older
or in dual-career
couples than in the
past.*

a significant increase in deaths in young people due to AIDS. The changes in the patient population are felt by residents who are overworked and stressed in different ways than they were in the past.

Residency training became the center of public controversy in 1984 with the case of Libby Zion, an 18-year-old woman whose death from undiagnosed bronchopneumonia was attributed to inadequate care from overworked and undersupervised residents. As a result of this case, there have been charges that residents work longer hours than are considered safe, and legislation was passed in New York that imposed limits on the number of hours worked consecutively and per week. Legislation has not been passed elsewhere, but at least 12 states—which collectively train more than 55 percent of all residents—initiated legislative or regulatory activity involving residency training programs. Hours legislation has had an impact and reform remains a lively issue. There has been increased attention paid to the residency experience across the nation.

In addition to the changes in medical practice, there also have been

significant changes in the resident population itself. While residents in the past were mostly young men with wives to take care of the home and raise the children, the resident of today is just as likely to be a young woman trying to coordinate childbearing with residency, or a young man who shares household responsibilities and child-rearing with his working wife. Residents now are more frequently older or in dual-career couples than in the past.

In 1990 women made up over one-third of medical school graduates. The Association of American Medical Colleges reported that by 1988 almost half of pediatric and ob/gyn residents were women, as were more than one-third of psychiatry and family practice residents, and one-fourth of internal medicine residents. A 1987 survey of over 170 graduates of residency and fellowship programs at the University of Minnesota Medical School found that a large majority of residents were married, and almost half became parents by the end of their residencies.

Maureen Sayers, MD and her co-authors reported in 1986 in *The New England Journal of Medicine* that pregnancy was a common event during residency. One out of eight married women residents in Harvard-affiliated training programs carried a pregnancy to term each year.

With these changing demographics, the combination of family responsibilities and graduate medical training has become an important issue. Residency training often occurs at a time that conflicts with developmental and maturational tasks in a young person's life—the time needed to develop a relationship with a partner, to achieve

independence and, in some cases, to bear a child as the age limits of fertility approach. The demands and hours of traditional graduate medical education leave little energy or time for personal pursuits, whether family or other significant commitments.

Residents and training programs have begun to pay more attention to these stresses on residents and their families. Just as residents need time for training and professional activities, they also need time for relationships in their lives and for caring for their children if they are parents. Marriages and relationships with close friends have a tendency to be put on hold. People, especially those in intimate relationships, often cannot endure being put on hold for long. Children cannot be put on hold for any period of time.

There is growing recognition that changes are needed. Although there are increasing numbers of flexible work

schedules for physicians in practice, the situation in graduate medical education is only beginning to reflect this shift. Shared and reduced-schedule residencies offer one solution to the long hours and stresses of residency and to the conflicting demands of pregnancy and childrearing.

In a shared residency, two residents share one position, usually alternating months on clinical rotations with time off to devote to families, research or other pursuits. I surveyed five pediatric training programs, all in major teaching hospitals, that have shared or part-time positions. In four out of five, residents alternated one month on and one month off, fitting into the regular rotation schedule that all residents follow. Reduced-schedule or part-time residencies are similar: one resident, without a partner, alternates

a month or more of work with a month or more off.

Shared residencies are not new. From 1971 to 1973 an ad hoc group of Harvard Medical School students and faculty met to study the possibility of establishing part-time residency positions at Harvard teaching hospitals. The Harvard Reduced-Schedule Residency Project was created and it gained a national focus when, in 1976, the Health Professions Educational Assistance Act was passed by Congress and signed into law.

Section 709 of
this act
man-

Elizabeth Rider (below) with her husband, Brook Longmaid, MD, and their children Parker and Emily, and (right) on the wards at Children's Hospital. Photos by John Kane.



dated shared schedule positions in primary care residency programs receiving federal assistance. However, due to Reagan administration budget cuts, Section 709 was repealed in 1981 and primary care residency programs are no longer required to offer shared residency positions.

It has been 30 years since the first account of a training program with flexible schedules for residents was published, and 20 years since the Harvard Reduced-Schedule Residency Project was created. Over the past 10 years there have been only a few papers in the literature addressing part-time training. However, the need for flexible training opportunities continues and will only increase as more physicians, men and women, in two-career couples begin residency training.

Medical students across the country have shown a high degree of interest in part-time training programs, although few have become involved in them. In a study published in the *Journal of Medical Education*, researchers Alton Sutnick, MD, Gary Burkett, PhD and Ira Gabrielson, MD surveyed over 1,200 third-year medical students and found that over one-third of the men and over one-half of the women indicated they would either definitely or probably want part-time training if it were available. The reasons given by students were two-fold: dissatisfaction with the time demands associated with current residency positions, and the desire to devote more time to personal and family concerns. An earlier study of 300 medical students published in the same journal reported similar results, finding that about two-thirds of the students agreed that the time demands in most medical practices were unreasonable.

Shared residencies have many benefits. In 1984 Eric Schaff, MD and Robert Hoekelman, MD published in the *Journal of Medical Education* a study of 15 pediatric residents at the University of Rochester who completed reduced-schedule training. The authors reported that 100 percent of

the 34 full-time medical faculty surveyed felt reduced-schedule residents performed equally as well or better than residents with the traditional schedule. Many faculty noted that the reduced-schedule residents were more mature, balanced, self-confident, independent and satisfied than residents with traditional schedules.

I investigated shared residency opportunities because flexibility was important for my own situation. Medicine is my second career. I came to medicine after an eight-year career as a senior supervising clinical social worker, child and family therapist, clinical researcher, mental health manager and graduate faculty member. During medical school I had two children—a son who is now five years old and a daughter who is two years old.

When considering residency options, I was attracted to pediatrics as a specialty devoted to promoting the well-being of children and their families. I realized that if I did a full-time residency, the costs would be very high for my family. Given my knowledge of child development, I felt that the hours I would work in a traditional training program would be difficult both for my children and for me as a parent. With the time commitment required to be the kind of parent I wanted to be, as well as to be a good physician, sharing a residency made the most sense for me.

I set out to create the opportunity to do a shared residency. My first goal was to find a partner with whom to share one. With the support of Daniel Federman '53, dean for medical education, and the HMS Office of Student Affairs, I wrote to 80 medical school deans, MD/PHD program directors, and to fourth-year students at several medical schools. I also spoke with residents sharing or on reduced schedules, and with several training program directors who offer flexible training opportunities.

Several options became available to me for sharing residency positions and I pursued one with an HMS classmate,

Jim Plews-Ogan '91. In July we began a shared residency at Children's Hospital in Boston. Jim is also a parent. He and his wife, Peggy '91 (who has begun a part-time residency at Brigham and Women's Hospital), are alternating child-care responsibilities each month for their infant daughter.

In my determination to find a residency partner, I created a national clearinghouse called Pediatric Residency Partners to match individuals interested in sharing a residency, and to serve as a resource to help people arrange flexible training schedules. I found that there was interest nationwide, and I heard from medical students and interns from as far away as Hawaii, Texas, Wisconsin, Arkansas and California.

Many, but not all, were parents seeking residency arrangements in which they could spend more time with their families. Others wanted time for research or other pursuits. I also heard from several medical schools looking for ways to be responsive to the needs of medical students desiring flexible residency training arrangements, from several editors and free-lance writers preparing papers about flexible work options in medicine, from a medical specialty organization seeking to offer information about flexible training options to its residents, and from a group practice seeking part-time pediatricians.

Hospitals that provide flexible training opportunities should be commended for their forward thinking, their sensitivity to the needs of their residents, and their willingness to take some additional time to make arrangements in a different way than they have done in the past. In my own search for a shared residency, I found David Nathan '55, Robert Masland, MD, Lovejoy and others at Children's Hospital, as well as Donald Medearis '53 at Massachusetts General Hospital encouraging and helpful in arranging flexible schedules in their pediatric training programs.

My residency partner and I alter-

nate four weeks of work with four weeks off, fitting into the rotation schedule followed by all interns at Children's Hospital. During the one month of internship I have completed so far, I learned a great deal in the fast-paced world of the hospital ward. There were many opportunities to learn about diagnosing and treating patients and about innovative approaches to pediatric care. I very much enjoyed taking care of my patients and their families, and seeing many improve. It was a challenging, stimulating and rewarding month, and I am looking forward to beginning my next rotation soon.

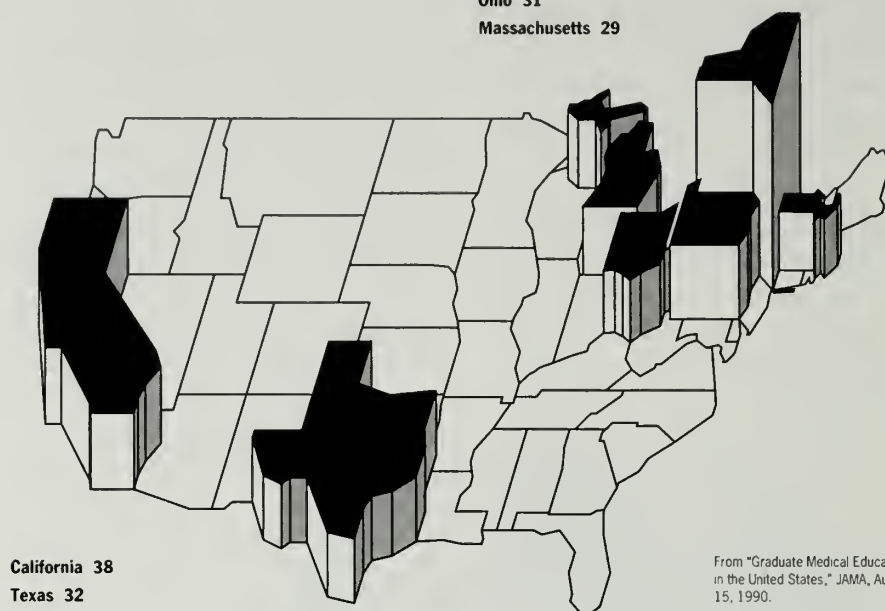
During the two months I have had off, I see patients in my continuity clinic one half-day each week. I attend teaching conferences almost every day, but in contrast to the months I am on rotation, I am rested and can therefore learn more easily from the material presented. I have had time to read, attend meetings of the two HMS committees to which I have been appointed, write several papers, manage Pediatric Residency Partners, and to consider doing some research.

There has been time to think about my rotation month, what I've learned and how to integrate the experience. I have been able to reconnect with my husband and children. When my next rotation begins, I will return refreshed and emotionally available to my patients and colleagues. The last time I saw my residency partner at the hospital he remarked, "Isn't it great?" We talked about the advantages of sharing a residency: balance in our lives, time for relationships and children and, occasionally, time for ourselves.

Sharing a residency has allowed me to spend extra time with my son as he begins kindergarten, and with my daughter as she makes the transition into the toddler class at her day care center. As I play with my daughter and rock her to sleep at night, or spend time discussing with my son his thoughts and feelings about his new school, friendships and life, I realize

States with the largest number of shared residency programs

New York 93
Pennsylvania 37
Michigan 34
Ohio 31
Massachusetts 29



From "Graduate Medical Education in the United States," JAMA, August 15, 1990.

how fortunate I am not to miss these intimate and important moments. During the months I am not formally scheduled, I delight in the long talks my husband and I can have in the late evenings, the extra time I have to enjoy my children, and the time I have to see close friends and to keep up with their lives.

While I am on rotation, I leave home each morning before my children awaken and often return at night after they have gone to bed. When I come home after working 36 hours on call, I am sometimes awakened in the middle of the night by one of my own children. However, knowing that this schedule is time-limited and that I will again be able to parent my children on a more consistent basis when my current rotation is complete, my energies are available to devote to my patients. I am able to become intensely involved in my work and enjoy it.

It is important to note that the key to a successful career and family life is a supportive spouse. My husband, an attending physician at New England Deaconess Hospital, is committed to equal parenting responsibilities and equal career opportunities for both of us. He is a supportive and caring hus-

band and father.

Despite the complexity of managing both family life and residency, and my having come to medicine after a professional career in mental health, the advantages far outweigh the disadvantages. My own experience as a parent has enabled me to empathize with and to be sensitive to the needs of my patients and their families. Providing evaluations and therapy for emotionally disturbed children and their families, managing emergency services at an outpatient child psychiatric clinic, and training graduate students and staff for a number of years before attending medical school have given me a framework for working with patients, colleagues and students as a physician.

When one of my patients (who was the same age as my youngest child) died unexpectedly during my first month of internship, I was in touch with the pain and profound loss a parent feels in such a situation. Because of my previous professional experience, I had a framework to deal with my own feelings so that I could help the mother deal with her shock, anger and grief at the loss of her small child. There is a familiarity in working with children and parents that has made being an

intern easier.

A shared or reduced-schedule residency can be an important opportunity for reasons other than family. In speaking to residents sharing positions in pediatric training programs across the country, I found that some have arranged shared or part-time residencies to have time for research or professional pursuits in other areas such as writing, music, or even Olympic training.

Shared residencies are not just for parents or married residents, but are important options for all residents. Residents who have satisfying personal lives will be better able to give of themselves to their patients. As residency programs become increasingly sensitive to the needs of their residents, it can be expected that residents will in turn be more sensitive to the needs of their patients.

It is difficult to find a partner with whom to share a residency—a partner who wants the same specialty, during the same years, in the same geographic location, at the same hospital. Increasing the availability of part-time or reduced-schedule options (without sharing) would allow more residents to have flexible training opportunities.

Other methods to reduce the stresses on residents and to allow them more time for healthy personal lives include such options as limits on consecutive hours worked, increased numbers of residents in any given program, work in shifts, 24-hour ancillary support, increased administrative support, a night float system that allows residents to go home on their call nights, support groups for residents and spouses, four weeks of vacation spread out over the year, support from assigned faculty advisors, on-site day care, liberal maternity and parental leaves, increased time in ambulatory care and less in inpatient care, alternating stressful rotations with less stressful rotations, and less frequent night call.

Are there disadvantages? When I rotate on to a new service, I am at a different level of experience than my

Residents who have satisfying personal lives will be better able to give of themselves to their patients.

fellow interns who have worked many more months than I, requiring a quicker adjustment. It becomes important for attending physicians and supervising residents to recognize and to be sensitive to differences in levels of experience and, perhaps, individualize their teaching to a greater degree. In addition, there are fiscal realities for residents and hospitals, and the time required to complete training is longer. My residency will probably take me five years instead of three, and my paycheck is half that of my colleagues—not quite enough to cover my daughter's day care expenses.

Moonlighting and other work may offer one solution. After completing their internships, many of the shared residents I have spoken to at various programs around the country moonlight or work part time in clinic settings on their months off. The pay is good and the time requirements are flexible and considerably less than their months on residency rotations. This enables residents to earn more money and still have time for their families or other commitments.

In their *Journal of Medical Education* article, Schaff and Hoekelman note that reduced-schedule residency training does not add appreciable financial burdens for the training program itself. Many hospitals provide full fringe benefits for their shared or reduced schedule residents as they do for all part-time employees who work a certain number of hours per week. In

some programs the costs of providing full benefits are balanced by the income that residents generate during their continuity clinic sessions.

Is it worth it? Absolutely. Temporarily I am on a different track than most of my colleagues. However, it is one that lends much richness to my life and provides me with energy and enthusiasm for my patients as well as for my family.

After I completed my social work graduate school internship at Judge Baker Children's Center a number of years ago, I had hoped someday to become a resident at Children's Hospital. To be able to do so, and to have the opportunity for a flexible training program so that I can be the kind of parent I want to be while learning to become a good doctor, is a dream come true. After I complete residency and fellowship training, I would like to teach residents as well as work on a broader systems level to design innovative training approaches to meet the changing needs of residents and their patients.

Shared residency represents one creative approach that will enable physicians to combine healthy personal lives with productive careers. Given the changing patterns in the practice of medicine and the different resident demographics, if today's residents are to continue to succeed in humane and not just technological terms, they must be given the opportunity to live humane lives themselves. There is a growing recognition that adaptations are needed in residency training, and our patients will only benefit by this process. ❖

Elizabeth Rider '91, who also has an MSW from Smith College, is an intern in pediatrics at Children's Hospital in Boston. This article is adapted from her thesis on graduate medical education, which won her the Dr. Sirgy Sanger Award for excellence and accomplishment in research, clinical investigation or scholarship in psychiatry.

All in the Family

The Gundersen Legacy

by Susan T. Hessel

Now Dr. Gundersen, Adolph is seated in the second row on the far right in this 1890 graduation photo from the University of Christiana Medical School.



FOR MANY YEARS DURING THE EARLY 20th century, the life cycle in La Crosse, Wisconsin was said to consist of birth, christening, an operation by Adolf Gundersen, and death. Such was the influence the surgeon had on this Mississippi River town, where medicine had previously been practiced more like a carnival show than a science. Gundersen literally transported the city's medical care from the 19th century to the 20th.

At the time of Gundersen's arrival

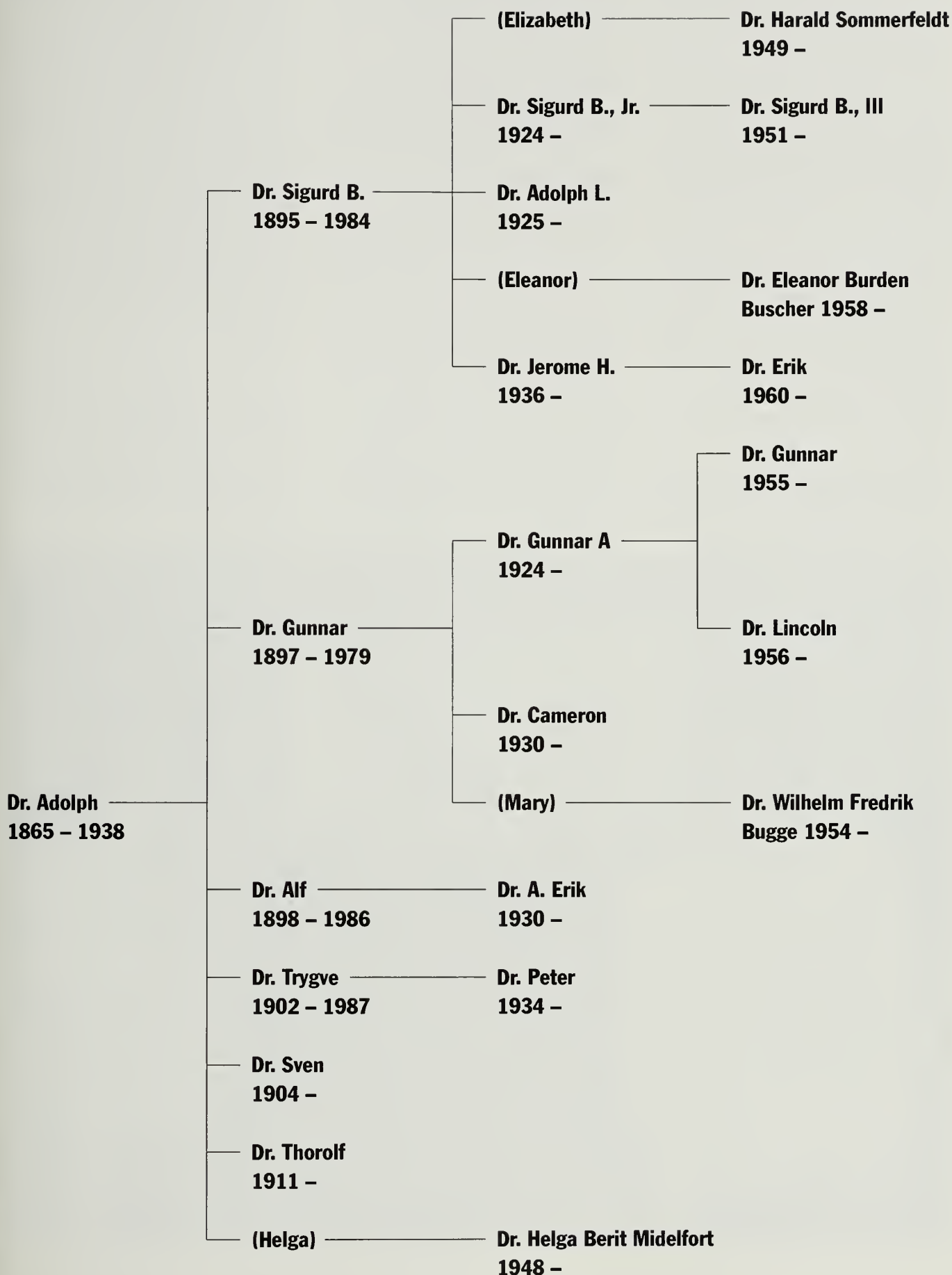
in La Crosse in April 1891, the best known "doctor" was David Frank "White Beaver" Powell, a veteran of Buffalo Bill Cody's Wild West Show. He attracted patients with his "No Cure—No Pay" advertising and patent medicines like Yosemite Yarrow, which he advertised "magically relieves internal and external pains."

Powell relied on endorsements by patients like Ed Riley, whose surgery for crossed eyes was reported by the *La Crosse Chronicle*. Riley, the article said, would "thump the first man who calls him 'Squint-Eyed Riley' for he had no crossed eyes now and don't want anyone to forget it."

More conventional doctors were not as enamored with Powell as the citizenry, who elected him mayor four times. When criticized by physicians, Powell challenged them to "put up or shut up." No record exists on how they responded.

Gundersen's difference was one of both style and substance. His training at Norway's University of Christiania and at medical centers in Vienna and

Gundersen Family Physicians



Berlin put him heads above most other doctors in the city. He quickly became the city's premier surgeon in association with Christian Christensen, also a highly trained Norwegian physician.

Gundersen was a member of what La Crosse industrialist Charles Gelatt called "a breed of long-gone charismatic 19th century men." Said Gelatt, "I don't know whether we always had them; but we don't have them anymore. Men scurried out of the way of these men because what they wanted, they were going to get—and what they said was going to go!"

Charles Gelatt had an early lesson in the ways of Adolf Gundersen. As a six-year-old, he was rushed to the surgeon after he developed what he described later as one heck of a belly ache. He vividly remembered Gundersen peering through his half-moon glasses at him in the operating room at La Crosse Lutheran Hospital. Gelatt became panicky as the time came to administer anæsthesia. He pleaded for a moment to calm himself.

"Courage, boy," was the response from Adolf Gundersen, who slapped the ether mask on young Charles' face.

The charismatic Adolf Gundersen left a legacy of both medicine and character. Twenty descendents have become doctors and a twenty-first is in medical school. Of these, nine graduated from Harvard Medical School: sons Alf '23, Trygve '26, Sven '29 and Thorolf '35; and grandsons Adolf L. '45, Sigurd B. Jr. '48, A. Erik '55, Gunnar A. '48 and Peter '62.

From Adolf Gundersen's dynasty of sons, grandchildren and great-grandchildren would come one of the nation's largest multi-specialty group practices, the Gundersen Clinic. The clinic grew in an era when many considered group practices to be suspect, bordering on socialism. But the distance of La Crosse from major metropolitan areas (150 miles from Minneapolis and 200 from Milwaukee), plus the personality of Adolf Gundersen, led to the clinic's growth.

While the story may have been

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embellished with time, it appears Gundersen came to the United States after reading an advertisement for a doctor or assistant placed by Christensen in a medical journal. Gundersen accepted the position, but planned to stay only long enough to get sufficient "shiny, jingling dollars" to repay his medical school debts.

The practice was not easy. Working in crowded offices above the Bellerue Drug Store in downtown La Crosse, he found both the temperature and patients were frequently unbearable. Gundersen was shocked by the lack of respect doctors received in America. Most offensive was being called "Doc."

"These busy Americans don't even have time to say the whole word, doctor, but have shortened it just to 'Doc'—a snotty, ugly word, even worse than 'doctor', which is used here by dentists, pharmacists and all kinds of riffraff," he wrote his family.

Although he threatened frequently to return to Norway, Gundersen stayed and accumulated an impressive list of accomplishments. He was said to have performed the first, or at least one of the first, appendectomies in Wisconsin in the 1890s. So frequently did patients with belly aches arrive on a train that stopped behind Lutheran Hospital that the train was dubbed the Appendectomy Limited.

In 1899 Adolf delivered a medical paper to the Norwegian Medical Society on appendicitis. By 1912 he had performed 100 consecutive suc-

cessful appendectomies, a feat he reported to the International Surgical Association. He also reported on prostatectomies, spinal anæsthesia, lung abscesses and ectopic pregnancy.

Gundersen's presence was felt intensely throughout Gundersen Clinic and the adjacent Lutheran Hospital. It was said that nurses in Lutheran Hospital knew just where he and his trailing entourage were when he made rounds. Some said the nurses were warned of his impending arrival on the floor by a clandestine tap on the pipes; others said it was by the abrupt change of atmosphere from calm to intense anticipation.

The nurses, in starched white uniforms, would stand at attention for him and the other doctors, who were all dressed in long black coats. A secretary followed with patient files as Gundersen inspected the condition of all patients, regardless of whether they were his own.

The late Winifred Lester recalled her first experience with A. Gundersen as a student nurse in 1919. She could sense the tension in the air when he arrived on the floor. "I hit the closet. We student nurses just hid in the closet." After graduating from nursing school at Lutheran, she became Adolf Gundersen's operating room nurse. The fear she felt for him was replaced by a great respect.

While autocratic in style, a reflection of his European training, Gundersen did have a soft side. His coachman's daughter, Ragna Isaksen Olson, recalled her sister's post-tonsillectomy examination.

"Well, you have to take some medicine," Gundersen said, and sternly wrote out a prescription. The fearful family took the doctor's order to the neighboring Gorder's Drug Store, where the druggist smiled and handed the little girl a box of candy.

Gundersen was said to have encouraged other young men to become doctors, though he never did his own children. "It's none of my doing that they're doctors," Adolf Gundersen said

of his six physician sons in a rare interview in 1930. "I told them not to be doctors. What kind of a life is it for a man? No time to himself; up at any hour. I warned them against it, but they wouldn't listen to me."

Four sons practiced in La Crosse: Sigurd Sr., who was often called "a master surgeon"; Gunnar, who became president of the American Medical Association and was the first chairman of the Joint Commission on the Accreditation of Hospitals; Alf, sought out by doctors from throughout the nation to learn transurethral surgery; and Thorolf, who brought internal medicine to a clinic oriented toward surgery.

The oldest son, Borge, returned to Gundersen's native Norway to run his mother's ancestral farm after studying agriculture and forestry at the University of Wisconsin in Madison. Although he also apparently wanted to

be a doctor, the custom of primogeniture gave him exclusive right—and responsibility—to inherit and operate the ancestral lands.

Two other sons practiced in the East. Trygve trained in ophthalmology at the Massachusetts Eye and Ear Infirmary, was on the Harvard faculty for some years, and had a Boston University eye clinic named after him. Sven, an internal medicine specialist, was elected president of Mary Hitchcock Clinic, which is associated with Dartmouth Medical School in Hanover, New Hampshire.

The only daughter of Adolf and his wife, Helga, also named Helga, married C. Fredrik Midelfort, a psychiatrist who also came from a Norwegian medical family and who was known as a father of family therapy. His father, Christian, a classmate of Adolf's in Norway, established the Midelfort Clinic in Eau Claire, Wisconsin, a city

100 miles to the north of La Crosse.

The family was often honored. Three members—Adolf, Alf and Trygve—were given the Knight of the Order of St. Olaf, the highest honor bestowed on a person of Norwegian ancestry living abroad. Adolf Gundersen also received the Malthe Gold Medal, a posthumous award from the Surgical Society in Norway. His son Thorolf accepted it on his behalf in 1984.

Adolf Gundersen's skill as a surgeon brought him patients from much of Wisconsin, Minnesota, Iowa, Illinois and the Dakotas. One Oak Park, Illinois woman wrote him in 1926 that she would like him to perform her hysterectomy because, "I am not afraid of you, because I feel that you know what

Adolf Gundersen and his "boys" (below), back to practice medicine with him, stand outside the new clinic building. From left, Gunnar, Adolph, Alf and Sigurd.





Helga Gundersen [above] was the center of authority in the Gundersen home. Here she poses with her granddaughters, all in traditional Norwegian clothing. From left: Mary, Signe, Anne and Elizabeth.

you are doing always. I have always had that confidence in you and I most certainly haven't of any other surgeon I know."

Another patient who had utmost confidence in Gundersen was his daughter, Helga, who needed a mastoidectomy as a young girl. He went into the operating room knowing that another La Crosse surgeon had operated on his own daughter for appendicitis only to lose her.

For some unknown reason, immediately after Gundersen operated on his

daughter, he had his tonsils removed by his associate, Edward Carlsson, a family practitioner. Helga said her brother Sigurd worried about both of them. The operations were performed prior to the development of antibiotics and her father had a cold at the time.

Following surgery, Adolf "bled like a stuck pig," his son Thorolf recalled.

"But he was running across the hall seeing how Helga was all the time."

Helga also remembered her father checking on her frequently. "He would walk in, in his nightgown, blood all over him, to see how I was doing."

A. Gundersen's most illustrious patient was President William Howard Taft, who came to La Crosse on September 17, 1909 to dedicate the city's new YMCA building. The president, distressed by an intestinal ailment, was referred to Adolf Gundersen as the best doctor in town. Patient and doctor got along well, except for a little trouble in communication.

"Father used some professional language with him, talking about his bowels not having moved and Taft didn't understand what he was talking about," said Adolf's son Gunnar. "Finally he just thumped his head and said, 'Well you need to shit, that's all. You need an enema'."

Evidence of another classic A. Gundersen story can be found framed in the board room of the Gundersen Clinic. It seems that in 1911 the Wisconsin State Barbers Board of Examiners got wind of some unlicensed barbering going on in Lutheran Hospital. Not wanting such flagrant disregard of the barbering board's authority to go unchecked, the head of that organization wrote a firm letter to Adolf Olson, whom they believed responsible.

Dear Sir:

We have received several complaints that you are doing barber work in the hospital. Now you will have to stop that at once, or you will get yourself into trouble. The barbers in La Crosse are all watching you and if you do not stop we will soon hear of it.

Now if you wish to avoid trouble for yourself, you will except [sic] good advice.

Respectfully,

*Chas. L. Weblit
Secretary*

A. Gundersen fired back this response dated May 14, 1911.

Adolf Olson is our assistant in the hospital and shaves on our order. If the complaining barber is willing to take Mr. Olson's work, he may start in any time—we shall first try his ability in shaving around anus. Next time please save your foolish advice.

A. Gundersen

Early on, Adolf Gundersen found himself without peers. He was too well educated to associate with other immigrants, yet “Yankees” sought medical attention in Milwaukee or Minneapolis for anything serious. They considered Gundersen good enough to care for their servants—if he entered by the back door.

Such attitudes were so infuriating to Adolf that he once refused to make a night house call for a family member of one of the city's elite, industrialist Charles Colman. As the story goes, after Gundersen declined to come, he was told it was for their sick dog, to

*In an age when
doctors were godlike,
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which Adolf responded, “I’ll come right away.”

Because of these experiences, Adolf Gundersen always told his sons to “take care of your Norwegian clients. Don’t worry about the socialite people because they never stay here to have anything done, even if you do advise them.”

In 1920 the sons began returning to La Crosse to practice with their father and his associate, Dr. Carlsson. Gunnar, the third son but the first to return, was followed by Sigurd Sr. in 1922 and Alf in 1926. Thorolf joined the practice after Adolf’s death, but was

away during World War II.

Even before the death of Adolf Gundersen in 1938 on the family’s ancestral lands in Norway, responsibility for the clinic fell into the hands of the second generation of Gundersens—Sigurd Sr., Gunnar and Alf—as Adolf Gundersen began leaving the practice for longer periods, because of health problems and for annual trips back to Norway.

Papa Sig, as Sigurd Sr. was often called by the nursing staff, exuded confidence. When he put his arm around a patient and said, “We’re going to fix that in the morning,” no one doubted him. In an age when doctors were godlike, he was considered the most divine of them all.

Some women patients took as souvenirs whatever his hands happened to have touched: prescription pads, pens, pencils. Eventually, nurses like Virginia Doolittle learned to clear the room of these items before certain women arrived. “They worshipped him so much,” Doolittle said. “There were also patients who testify to the fact that when they were going to sleep (for an

The eight Gundersen children in 1960 (below). Front row from left: Helga, Borge and Trygve. Back row from left: Thorolf, Sven, Sig, Alf and Gunnar.



operation), they saw the hand of God with Dr. Sig.” (Dr. Sig was not, however, a good patient. Once when hospitalized with a bleeding ulcer, he disappeared from his hospital room only to be found in the operating room performing surgery on a patient with a bleeding ulcer.)

Sig Sr. also was a great teacher, according to the late Ben Lawton, a general surgeon who became president of the Marshfield Clinic and the University of Wisconsin Board of Regents. “Dr. Sig was a wonderful teacher in teaching by example. It was not just in the technique of surgery, of which he was a master, but in his dealing with human beings,” said Lawton, who did some of his training at Gundersen.

If Sigurd was the master surgeon, Gunnar was the master politician. His son Cameron, a pediatrician who practiced at the clinic from 1965 to 1989, said his love of politics evolved out of his love of people. “I think he enjoyed talking with patients probably more than taking care of their medical or surgical needs. He was more interested in the people than he was probably in medicine or surgery.”

After graduating from Columbia University Medical School in New York, Gunnar came back to do an internship with his father. “I don’t know exactly why he was the one who was called back,” said his son, Cameron, “but I think it was largely because of his ability to communicate in a variety of languages, principally Norwegian, German and English.”

Gunnar’s national reputation peaked in 1958 with his election as president of the American Medical Association. He was, in a sense, a perfect national story—a small town doctor who made it to the big time. Being president of the AMA led to profiles in such magazines as *Parade*, the Sunday newspaper supplement. The writer was amused by the Jeep-riding doctor who tended his garden of roses and trees.

In later years Gunnar said his greatest accomplishment was in resisting

socialized medicine, which he believed was being forced on the public. During his administration, the AMA established a Washington office to lobby for and against legislation.

Gunnar also was quite active in the World Medical Association, a group of physicians from different countries who met to discuss world health issues and to upgrade the level of medical practice throughout the world.

“Medicine, like religion, speaks a universal language, which passes all barriers of race, creed, color, and nationality,” he said in a speech at his AMA inauguration ceremonies in San Francisco. “We physicians have a unique opportunity to provide a spark of leadership, which can help bring the world closer to the dream of world brotherhood.”

While Gunnar took his political and clinical medical knowledge on the road, his brother Alf was the master teacher. Doctors traveled to La Crosse—some from as far away as Norway—to learn his technique of transurethral resection, which dramatically reduced deaths from prostate surgery.

Alf Gundersen loved to have all those around him learning constantly, and not just about surgery, according to nurse Doolittle, who worked with him for 36 years. One Friday afternoon, Dr. Alf came in reciting Longfellow’s dramatic poem “The Song of Evangeline.” After three or four stanzas, Alf urged her to join in. Unable to remember the poem she had learned in high school, Doolittle spent the weekend memorizing it. When Monday came, however, Alf was on to something else. “He never said another word about it,” she laughed. “He wanted people, out of their own curiosity, to go ahead and learn these things.”

Alf was a gregarious man who frequently referred to himself as a “humble man,” always adding, “I have a lot to be humble about.” He enjoyed jokes on himself. Robert Swartz, former director of the University of Wisconsin-La Crosse’s Norskedalen,

recalled the occasion when Alf was to be interviewed about his gift to the nature and heritage center near Coon Valley, Wisconsin. Alf donated his 110-acre farm, Hi Hope Springs, which became Norskedalen’s Helga Gundersen Arboretum.

Before the cameras rolled, Alf gave an eloquent description of his love of Hi Hope over his traditional daiquiri. “I’m a Norwegian and I need towering hills and clear running water,” he told Swartz. When they walked outside for the interview, Alf turned to Swartz for advice about what he should say in the interview.

“Just say the same things you told me inside about being Norwegian and how you love the towering hills and clear running water,” Swartz said.

With eyes twinkling, Alf turned and said: “I don’t love clear water because I’m Norwegian. It’s because I’m a urologist.”

The strength of Adolf Gundersen’s medical practice and personality has since passed on to the third and fourth generations of Gundersens. Six grandsons and two great-grandsons went on to become members of the Gundersen Clinic medical staff, now composed of more than 260 specialists and subspecialists.

The growth of this medical practice, and its frequently favorable comparisons with the Mayo Clinic just 65 miles to the west, can be traced to Adolf Gundersen.

“My grandfather had a dream of medical excellence,” said Adolf L. Gundersen. “In his own way and in his own time, he established a standard for quality that continues to this day.” ❧

Susan T. Hessel is a freelance writer and former reporter for the La Crosse Tribune. In celebration of the Gundersen Clinic’s centennial in 1991, she compiled and wrote its history, entitled Medicine: The Gundersen Experience.

The Fearless Lucius Manlius Sargent

by Charles Newton Peabody

HARVARD SONS ARE CURIOUS PEOPLE, especially when they are driven by the fire of ideology as much as by the substance of discovery. When Memorial Hall in Cambridge is refurbished, its walls will still support plaques—engraved with old names now dimmed by time—for its new sons, and daughters, to consider. Aye, names like Captain Lucius Manlius Sargent, for example. This hero foretold his character, when one day a clergyman took him on his knee and asked him what he meant to be. “I don’t know, sir,” said the child, “whether to be a minister or a highwayman; but I should not like to be anything halfway.”

The Corinthian traits of the family were imprinted in our champion, who developed muscular and moral strength, became an accomplished artist, a man before the mast (although he found the sea “unfriendly to his constitution”), an admirer of good music and books, an antiquarian (whose curiosity took him back to walking the parapets of the high wall of Chester in Cheshire, England), and a fearless adventurer to its most fatal point. He was unrelenting in the ring, whether it be boxing or riding. But,

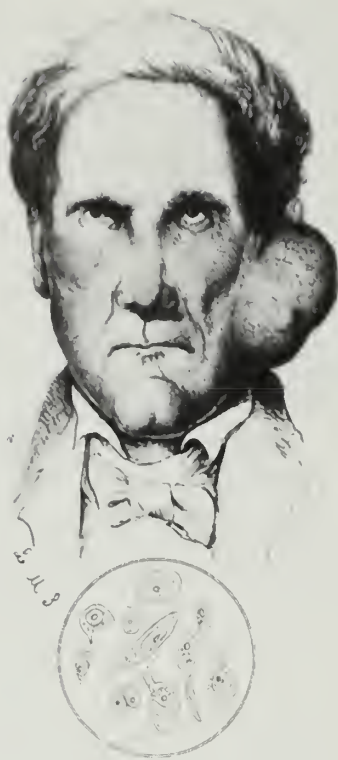
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halfway he was not.

The forbears of Lucius Manlius Sargent Jr. came from Exeter, England in 1678 to settle on the eastern point of Gloucester, Massachusetts, where the first American-born progenitor, Colonel Epes Sargent, was conceived. Our hero was the fifth generation of the line and his father, a wealthy lawyer and author (often writing in the *Boston Transcript* under the name of “Sigma”), was living comfortably off High Street in Boston at the time of his namesake’s birth on September 15, 1826.

A traditional childhood education under tutors like the Reverends W.A. Stearns, C.K. Dillaway and S.M. Weld insured Sargent’s acceptance to Harvard College in 1844. His education finally culminated, after several romantic interruptions, in his earning the degrees of Bachelor of Arts and Doctor of Medicine in 1857. A friend once confirmed Sargent’s nature by commenting, “Having decided to enter medicine, he made the business of preparation no halfway measure. His zeal was unbounded and his application unrelenting.” His favorite professors were H.J. Bigelow, Class of 1841; B.E. Cotting, Class of 1837; and G.H. Lyman.

Sargent’s proficiency in drawing led to an interest in art anatomy, which, combined with an appointment in 1855 as house pupil in the Department of Surgery at the Massachusetts General Hospital, brought him the distinction in April 1857 of being the first in the United States to be selected to a post of medical artist. His sketches of the dissection of the bones of the famous pirate Tully give a clue to the source of some of his anatomical material. Another popular subject was portraits



of patients with large tumors of the parotid gland. After his appointment as house surgeon, the staid records for the East Surgical Service suddenly are enlivened with drawings, illustrations and other artistic embellishments.

It was noted: "Few of his colleagues considered themselves his equal in wit, literature and science, and after graduation he soon became one of the most prominent physicians in the section of the city where he located, and a brilliant future seemed opening before him." Sargent's career embodied participation in such inquisitive organizations as the Society for Medical Observation, under the leadership of H.I. Bowditch, Class of 1832. Curiosity prompted one scientific report based on his observations on taking hashish: "His mind was possessed with whimsical ideas and his stature increased, and his eyes became bloodshot."

He was invited to join the newly founded Boston Obstetrical Society. But, one notebook contains some auspicious comments about ministering to his first maternity case as a medical student. A cartoon of a scene of a mother

and scornful midwife holding a newborn baby, entitled "It's too late, ye are," characterized his subsequent experiences in obstetrical practice. In addition, E.B. Cotting remarked that Sargent "was too kind hearted to listen to crying children and wailing women," and he later used enlistment in the Union Army as an escape from that stress.

When the great war of the rebellion broke out, Sargent joined many other Harvard Medical School sons as regimental surgeons or line officers. To do both, Sargent resigned his medical position in the 2nd Mass. Volunteers in October 1861 to accept a commission in the 1st Mass. Cavalry, with his brother Horace Binney Sargent, who later became brigadier general. To explain this decision, his brother quoted him as saying, "I am tired of curing wounds and I now prefer to make them."

He saw action at Kelly's Ford, Fredericksburg, Chancellorsville, Brandy Station, Culpepper and Antietam. But during an encounter with Moseby's Raiders at Aldie's Gap in 1863, Captain Sargent was felled by

a bullet that struck his chest, circumnavigated the subcutaneous layer of the thoracic wall, exited posteriorly and was later found in his boot. The Confederates, thinking he was dying, stripped him of his sword and pistols and left him on the spot.

He recollected a wounded rebel lying near him asking, "Have you had enough?" Apparently he had not. A local landowner found him still breathing and conveyed him to a shelter, where some women dutifully took care of him until finally he came under the care of his mentor, G.H. Lyman, in a base hospital.

Sargent's pen and ink renditions of camp scenes vividly portray the self-image of his military role, when again he returned to the field of action. In his last letter sent to his wife, Letitia (Amory), during the pre-Christmas season of 1864, he concludes, "May our heavenly Father grant that you and I and the children may never be separated on any of these days; but let us cheerfully and manfully bow to His will, whatever it may be."

In a combined maneuver to cut the Weldon Railroad, which was still sup-

The pirate Tuly's hand (below).





HERE HE IS
EATING HIS
BREAKFAST.



HERE HE IS SMOKING HIS
PIPE



HERE HE IS, WITH HIS LIEUTENANT
AT STABLE CALL.



HERE HE
IS ENTERING
RICHMOND.
MOND.

plying besieged Petersburg in Virginia, he lead a gallant cavalry charge "with knitted brow and lifted blade."

Suddenly a cannon ball smashed into his right upper thorax, fracturing his clavicle and causing pulmonary damage with minimal external signs. He fell in front of his mounted column, sword in hand—"a man of iron, and undaunted" in the eyes of one witness. He lingered three days before dying on December 13, 1864.

The general character of those men whose plaques adorn Memorial Hall is well summarized by remarks about Captain Sargent. One eulogist wrote, "He was fierce as a lion on occasion and tender as a woman, to his men. As a swordsman and horseman he had few equals and he was tireless, subordinate and uncomplaining. He was a patriot hero who nobly perished in unselfish effort to save a periled country."

Another commented, "It was natu-

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ral that a son of a Federalist tradition, whose childhood had been charmed by some tear-moving tale of heroism in flood or field, and whose character had been embraced by the influence of resolute and uncompromising opinion, should decide as he did."

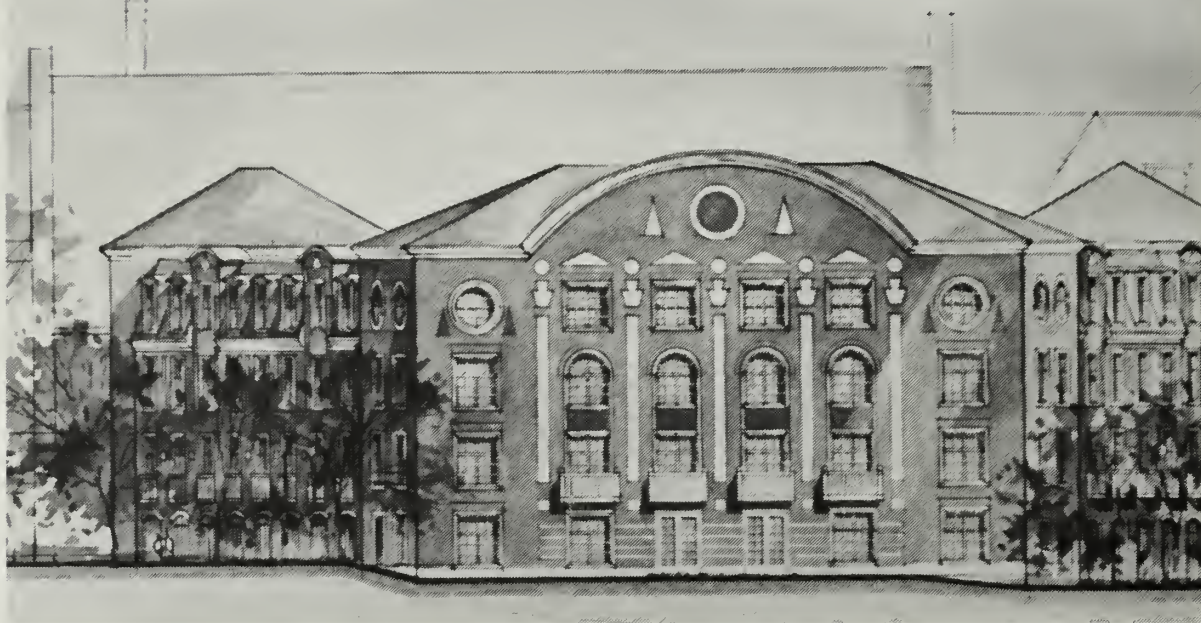
One timeless social perception is found in his embroidered student notebook. There is a pasquinade of a goliath-size man with large head, tailcoat, spidery legs and a heavy purse dangling from his hand, entitled

"Fellow of the Royal College of Surgeons." Close by is a diminutive youth hurling a disheveled vegetable at him. The cartoon was scribbled over, repentantly it seems. The fellow was probably Charles Bell of Edinburgh, who was visiting John Homans at that time.

This high spiritedness recalls that anecdote about the Chester French statue of John Harvard outside of University Hall, looking down at a taunting undergraduate who has just asked, "Is that you John Harvard?" and the seated figure retorts, "Aye, and long after you are gone." Veritas, but Memorial Hall will still honor the likes of Lucius Manlius Sargent. ❖

Charles Newton Peabody '48 is the author of ZAB, the biography of Brevet Major Zabdiel Boylston Adams.

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